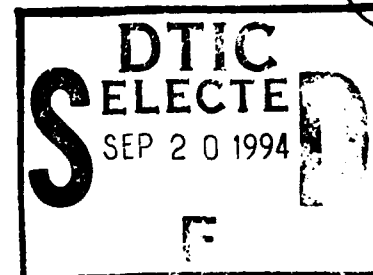


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**THE US FLAG MERCHANT MARINE:
A NATIONAL ASSET?**



A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE

by

JOHN P. LONG, LCDR, USN
B.S., Rutgers University, New Brunswick, New Jersey, 1979

Fort Leavenworth, Kansas
1994

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94-30160



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3 June 1994

Master's Thesis, 2 Aug 93-3 Jun 94

The U.S. Flag Merchant Marine:
A National Asset?

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Approved for public release, distribution is unlimited.

This study investigates the need for a U.S. flag merchant marine. Parameters used are those functions of a merchant marine enunciated by President Roosevelt in 1935: (1) protection of U.S. commerce from unfair foreign trade practices; (2) uninterrupted foreign trade in event of foreign war; and (3) a source of naval auxiliaries. Historically, the U.S. merchant fleet has suffered due to high costs, inefficiencies, and counterproductive legislation. These have significantly reduced the fleet's ability to compete in the international marketplace. Today's U.S. flag fleet contains 348 active ships. If deterioration of the industry remains unchecked, it is estimated there will be only about 217 by the year 2000. This study concludes that the U.S. flag merchant fleet is adequate only to fulfill its role in support of national defense, and principally as a source of manpower not shipping. Projections indicate a shortfall of mariners by the year 2000. The Military Sealift Command is dependent upon that pool of trained mariners for manning its reserve shipping in time of emergency. It is in the national interest therefore to support a vital U.S. flag merchant marine.

Merchant Marine, Merchant Fleet, Maritime
Industry, Ready Reserve Force, Maritime Administration

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1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the study and the objectives of the research.

2. The second part of the report is a detailed description of the methodology used in the study. It includes information about the sample size, the data collection methods, and the statistical analysis techniques.

3. The third part of the report is a discussion of the results of the study. It compares the findings with the previous research and discusses the implications of the study.

4. The fourth part of the report is a conclusion and a list of references. The conclusion summarizes the main findings of the study, and the references list the sources of information used in the study.

5. The fifth part of the report is a list of appendices. These appendices contain additional information that is relevant to the study but is not included in the main text.

6. The sixth part of the report is a list of figures and tables. These figures and tables provide a visual representation of the data and the results of the study.

7. The seventh part of the report is a list of footnotes. These footnotes provide additional information about the study and the sources of information used in the study.

8. The eighth part of the report is a list of references. These references list the sources of information used in the study.

9. The ninth part of the report is a list of appendices. These appendices contain additional information that is relevant to the study but is not included in the main text.

10. The tenth part of the report is a list of figures and tables. These figures and tables provide a visual representation of the data and the results of the study.

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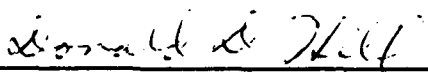
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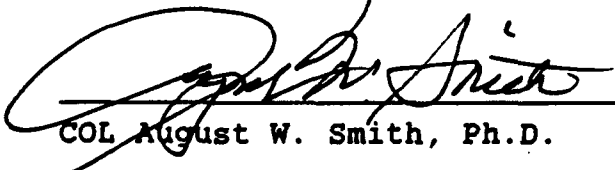
Name of Candidate: LCDR John P. Long

Thesis Title: The US Flag Merchant Marine: A National Asset?

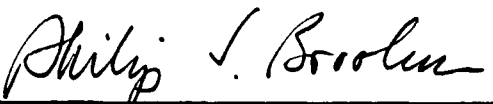
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The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

THE US FLAG MERCHANT MARINE: A NATIONAL ASSET? by LCDR John P. Long, USN, 101 pages.

This study investigates the need for a U.S. flag merchant marine. Parameters used are those functions of a merchant marine enunciated by President Roosevelt in 1935: (1) protection of U.S. commerce from unfair foreign trade practices; (2) uninterrupted foreign trade in event of foreign war; and (3) a source of naval auxiliaries.

Historically, the U.S. merchant fleet has suffered due to high costs, inefficiencies, and counterproductive legislation. These have significantly reduced the fleet's ability to compete in the international marketplace.

Today's U.S. flag fleet contains 348 active ships. If deterioration of the industry remains unchecked it is estimated there will be only about 217 by the year 2000.

This study concludes that the U.S. flag merchant fleet is adequate only to fulfill its role in support of national defense, and principally as a source of manpower not shipping. Projections indicate a shortfall of mariners by the year 2000. The Military Sealift Command is dependent upon that pool of trained mariners for manning its reserve shipping in time of emergency. It is in the national interest therefore to support a vital U.S. flag merchant marine.

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CHAPTER ONE

INTRODUCTION

So far as commerce affects, this country has a vital interest in the carrying trade, let theorists befog the cool air as they may; every dollar paid for freight imported or exported in American vessels accrues to American capital, and the enterprise is as much a productive industry as the raising of wheat, the spinning of fiber, or the smelting of ore.

J.D. Kelley, The Question of Ships

The United States is the largest trading nation in the world and yet in 1991, when 829.1 million tons of cargo passed through American ports, only 4%, 33.4 million tons was carried in U.S. flagged ships.² In fact, in 1988, merchant ships of the former Soviet Union carried more American cargo than did U.S. ships, including nearly 50% of the outbound U.S. mail.³ Such has been the precipitous decline of the US flag merchant fleet since the end of World War II.

Despite a long tradition as a seafaring nation and at least verbal support from several presidents including Nixon, Carter, Reagan, Bush, and Clinton, the U.S. merchant marine continues its steady decline, waiting for a rational National Maritime Policy. Until such policy is forthcoming,

the American merchant fleet will remain unable to compete against foreign shipping.

Over 50% of the world's merchant fleets are at least partially government owned, while others receive significant subsidies and/or other incentives.⁴ American shipowners have had several opportunities to avail themselves of government assistance in the form of both direct subsidies to offset construction or operating costs and indirect subsidies such as preference cargoes. Yet government subsidy is not the whole solution for the ailing merchant marine. In 1978, both Pacific Far East Line and States Steamship Co., each the recipient of government subsidies, filed for bankruptcy.⁵ Nevertheless, many owners have opted not to accept subsidies due to government restrictions and the increased administrative burden placed on them in exchange.

Another option available to shipowners is operation under a "flag of convenience." Registering ships in foreign countries (usually Liberia or Panama) frees the owner of a considerable U.S. tax burden and permits him to operate with non-American, non-union crews, reducing operating expenses immensely. Additionally, these foreign states have no regulation over where ships may be built or repaired.

Flag of convenience registry is a long standing maritime practice that at times has even been encouraged by the U.S. government. As recently as last summer, the two

largest liner services in the country, Sea-Land Services and American Presidents Line, filed applications with the Maritime Administration (MARAD) to begin transferring some of their ships to foreign registry, the high cost of doing business under the American flag and lack of government support being cited as reasons for the transfer. It is estimated that this change of registry would cost about 850 seagoing jobs.⁶

The decline of the U.S. flag fleet has had much farther reaching impact than merely lost income for shipowners. Shipyards have felt the pinch as well. In 1992, National Steel and Shipbuilding Co. of San Diego delivered a 713 foot containership to Matson Navigation Co., the first delivery of a large oceangoing commercial ship in this country since November 1987.⁷ Between 1980 and 1991, the number of active shipyards in America dropped from 110 to 62 with an associated loss of 41,000 jobs.⁸

Probably the most visible sign of the deterioration of the U.S. merchant marine were the problems associated with Desert Shield/Storm (hereafter referred to as Desert Storm). First, the activation of the Ready Reserve Fleet (RRF) did not go as smoothly as planned. The majority of those ships activated by MARAD were late arriving at their load out ports due to delays in activation. Minimal maintenance budgets contributed to the overall poor condition of the RRF.

Further compounding MARAD's problem was a scarcity of merchant mariners. To man the 42 ships of the RRF that were activated, MARAD had to "comb union halls and retirement rolls."⁹ Furthermore, the average age of America's merchant mariners is 55, and few young men or women are turning to jobs at sea. The navigator who sailed with USNS *Denobola* (T-AKR 289), one of the Military Sealift Command's (MSC) Fast Sealift Ships (FSS), had not been to sea in years and was 82 years of age.¹⁰

The hardest pill to swallow for most legislators, labor organizations, and the industry in general, however, was the fact that the MSC was forced to charter foreign shipping, particularly roll-on, roll-off (RO/RO) ships. Foreign charters cost about \$10,000 per day, per ship; roughly one-half the rate of a comparable American ship (had it been available).¹¹ Both VADM Francis Donovan, Commander, Military Sealift Command, and CAPT Warren Leback, Administrator of the Maritime Administration, were called to defend this action before the House Merchant Marine Subcommittee. The US flag fleet simply had insufficient ships of the right type to adequately support the deployment; there are only 11 militarily useful RO/ROs in the U.S. commercial fleet.¹²

Not all merchant shipping has suffered the same as the U.S. fleet. Some nations have continued to expand their merchant capacity, frequently with full government backing.

Prior to 1989, the former Soviet Union for example, had made great strides, not only increasing the size and prestige of its fleet, but making commercial inroads in many third world nations lacking the facilities to handle large, Western style shipping.

Despite the increased fuel prices and high capital costs which prompted a worldwide depression in maritime growth in the late 1970s and early 1980s, ocean transport remains today the most economic means of shipping goods great distances because of large capacity and low expenditure of power per cargo mile. Given that the U.S. is to remain the world's largest trading nation, it follows that it is in our best interest to maintain a U.S. presence on the world's trade routes.

Relevance of the Study

Throughout history, nations have sought to develop their own national merchant fleets. It may be for national pride and international prestige: "national flag shipping can be treated as an extension of national sovereignty to the seas."¹³ It may be for reasons of economic security. In 1914 President Woodrow Wilson argued: "that without a national flag merchant fleet our independence existed only on land and within our borders."¹⁴ In 1935, President Franklin D. Roosevelt delineated three reasons this country needed a national flag merchant fleet: protection of U.S. commerce from unfair foreign trade practices, uninterrupted

peaceful trade in the event of a major foreign war, and as a source of naval auxiliaries should America go to war.¹⁵

Former Admiral of the Fleet of the Soviet Union, Admiral Sergei Gorshkov, writing in 1979 concluded:

The endeavour by each state to use its own means (in commerce) is perfectly natural. Hence the need to possess the necessary merchant fleet, ensuring the economic and political independence of foreign trade and helping not only to save on the expenditure of foreign currency on ship freight but also in certain conditions derive considerable currency earnings for ones own budget.¹⁶

This study draws attention to the condition of the U.S. maritime industry and the far reaching ramifications of its demise. Not only does the American economy suffer as dollars leave the country in foreign ships, but real people will continue to lose work as long as the entire industry continues to atrophy.

In time of emergency, the Air Force, Navy, and Marine Corps possess a substantial degree of freedom to deploy anywhere in the world. The Army, however, being the heavy force, is almost entirely dependent on sealift. It would be prohibitively expensive both in dollars and time to consider deploying an armored unit by air. Prepositioning of Materiel Configured to Unit Sets (POMCUS), while suitable for rapid deployment of forces to a developed theater, such as Europe, is impractical when forces may be required to deploy anywhere in the world. Adequate sealift capability of some kind will be required to close forces in theater.

The same sealift will then be required to sustain them and redeploy them to the U.S. at the conclusion of a conflict.

The inadequacy of American shipping, government and private, to sustain a major military deployment is well recognized. Planning for such a contingency places significant reliance on the availability of foreign shipping to make up the shortfall. Unlike Desert Storm, however, not every U.S. military operation/intervention will enjoy universal support.

U.S. interventions in both Grenada and Panama drew considerable criticism from the international community. Of all our allies, only England was willing to publicly support U.S. unilateral action against Libya in 1986. In such situations, the availability of foreign flag shipping is questionable. Despite near universal support during Desert Storm, on at least one occasion, chartered shipping refused to enter the Southwest Asian war zone necessitating transloading of cargoes and subsequent delays. The reliability of foreign flag shipping would also suspect when confronted with a credible naval threat. It seems incongruous then that the foreign policy and security of the world's only superpower should be subject to the policies and politics of other nations shipping industries.

Purpose of the Research

This thesis is intended to research the state of America's maritime industry and to assess its current importance to the nation in terms of the three arguments advanced by President Roosevelt: protection from unfair trading practices; uninterrupted trade; and contributions to national defense. Specifically, it is intended to answer the question:

In today's world, does the United States need a U.S. flag merchant marine?

This primary question involves the following subordinate questions:

1. Does a U.S. flag merchant marine provide protection from "unfair" trade practices?
2. Can a U.S. flag merchant fleet compete in the international marketplace?
3. Would a major foreign war significantly disrupt U.S. trading practices?
4. Can the U.S. maritime industry fill the vacuum created by the loss of a major foreign flag carrier?
5. Can U.S. industry meet military requirements and commercial requirements simultaneously?
6. Can national security requirements be met through use of third country vessels?
7. To what degree the nation willing to support a U.S. flag merchant marine?

Scope and Limitations

The following assumptions apply throughout the research and conclusions of this thesis:

1. The current administration and Congress will remain supportive of the U.S. flag merchant marine.

2. Current legislation will remain in effect throughout the study period.

3. No significant change will take place within the existing U.S. shipping industry during the study period, i.e., significant gains or losses.

Limitations associated with this study include time and resource constraints. Research relied primarily on local sources. A number of journals and trade publications (such as, Journal of Commerce, Maritime Reporter, Daily Shipping News, and Shipyard Weekly) which represents a significant source of current information are unavailable locally. While these would enhance the study, they are not critical to its outcome. Additional original materials were unavailable through traditional library services. Classified materials are not used or cited in this research.

Shipping statistics, unless otherwise specifically stated, exclude all vessels engaged in inland and Great Lakes trades, government owned shipping, and special purpose vessels (tugs, cable ships, etc.). Statistics reflect only those vessels of 1000 gross tons or more displacement.

This study follows the following general outline:

Chapter Two: Literature Review.

Chapter Three: Research Design.

Chapter Four: Historical Conditions. Provides an overview of the rise and decline of the U.S. merchant marine, establishing the basis for its current weakness.

Chapter Five: Prevailing Conditions. Examines current conditions within the maritime industry and examines the outside forces which influence it.

Chapter Six: Employment. Examines the ability of the merchant fleet to respond to the needs of the nation under different conditions from peace through war.

Chapter Seven: Conclusions and Recommendations.

CHAPTER TWO

LITERATURE REVIEW

A considerable amount of information is available in the form of books, trade and professional journals, popular periodicals, newspapers and government publications. Additionally, numerous research studies and theses have been prepared on various aspects of the maritime industry, particularly as it impacts national defense planning.

Several books are available which address the merchant marine from various aspects. A Maritime History of the United States: The Role of America's Seas and Waterways is a wide ranging work addressing many of the more obscure facets of American water trades. As the title states, this is meant to be a historical survey and as such presents an equitable treatment of the maritime industry in this context. Because of its scope, it does not provide in-depth analyses of the merchant marine and its problems. It is significant; however, in its treatment of the post-colonial development of US maritime interests, the revolution of steam power, and the emergency shipbuilding programs of the world wars.

United States Merchant Shipping Policies and Politics, published by The Brookings Institution, provides

an in depth look at government regulation and influence in the maritime industry. It reviews the evolution of government regulations and the impact they have had (despite good intentions) on the long term decline of the US merchant marine and its current condition. It provides an extensive look at the problems faced by the shipping industry, and proposes alternatives for at least partial recovery. It is unfortunate that many promising proposals such as relaxation of "Buy American" and anti-trust restrictions, and the legislative divorce of shipping and shipbuilding industries are "politically incorrect".

Another product of The Brookings Institution, Bread upon the Waters: Federal Aid to the Maritime Industries, is an economist's view of government support. In it, the author examines the array of support measures shoring up the U.S. shipping industry. His analyses represent a truly different perspective. Speaking from strictly an economic viewpoint, he questions the need for an American merchant marine and challenges the prevailing arguments in its favor including its effects on balance of payments and relationship to national security. Here too, one finds the proposition that shipping and shipbuilding have been artificially linked by legislation, serving neither interest fully.

The author of The U.S. Merchant Marine: National Maritime Policy and Industrial Relations holds a similar

viewpoint. In his introduction he asserts "the industry has been rendered non-competitive by a misdirected national maritime policy."¹, and that this defect is the requirement to obtain ships from American shipyards. He maintains that if capital costs were equalized through competitive means (i.e. foreign purchase), operating costs could be reduced through incorporation of innovative technology. Any remaining differential could be made up through a beneficial tax strategy which is a near universal practice already. The end product of course would be a U.S. flag merchant marine fully capable of competing in the international marketplace.

In his classic, The Influence of Sea Power Upon History 1660-1805, Mahan attempted to link the development of sea power with the development of trade. His views were echoed by the modern apostle of sea power, Sergei Gorshkov in The Sea Power of the State. While Gorshkov devotes more space to the usefulness and development of the merchant marine, both agree it is requisite for the full development of a nation's sea power. Gorshkov, the pragmatist, further relates the strength of the Soviet merchant marine to its service as both an instrument of the state and an economic instrument, arguably in that order.

The U.S. Maritime Industry: In the National Interest is an excellent primer on the maritime industry. It provides summary treatment of most aspects of the

industry including history, policy, labor, and the international trade environment. In addition, it includes extensive statistical appendices.

The Question of Ships: The Navy and the Merchant Marine was an unexpected find. Based on an award winning essay written in 1883, LT Kelley's description of the U.S. merchant marine could very well have been written today. It details an industry in decline, yet suggests reforms that are still valid today including relaxation of "Buy American" requirements for vessels and materials.

The Maritime Administration, now in the U.S. Department of Transportation, publishes several documents that have proven of considerable value. The Annual Report of the Maritime Administration provides statistical information for all segments of the shipping trade and recaps the major events of interest within the U.S. maritime industry. The 1992 report is the most current. Unfortunately, in many areas, data is not cumulative between years, leading to potential gaps in available statistics.

"Desert Shield and Strategic Sealift" published in The Naval War College Review, although a relatively short article, provides a critical look at the sealift effort during Desert Shield. It brought to light many of the shortcomings in operation of the Ready Reserve Force, in particular the near critical shortage of mariners. Herein lies one of the prime arguments for a viable merchant

marine. The government may own a reserve fleet of ships, but only through commercial employment can sufficient qualified manpower be retained.

A number of research papers and reports are available, however, most of these are more concerned with military sealift capabilities than civilian oriented topics. Two studies are available which specifically address manning of the RRF are germane. A study prepared for MARAD by Presearch, Inc., entitled Crewing the Merchant Marine for Mobilization is an extensive report which projects a significant shortage of qualified mariners by the year 2000. Manning U.S. Strategic Sealift in the Year 2000, prepared at the Naval War College is a similar study. It suggests that the pool of mariners available will be unable to support a conflict on the scale of Desert Shield by the year 2000. A viable U.S. flag merchant marine would ensure that such mariners could be available. The issue of manpower is as important a piece of the national security aspect of the merchant marine as are ships, yet in many discussions, it is overlooked.

CHAPTER THREE

RESEARCH DESIGN

As an initial step, an investigation of relevant literature was conducted. Analysis of the information generated was then completed, leading to toward resolution of the subordinate research questions, in a progression toward final conclusions regarding the thesis question.

To answer the thesis question, this study will utilize the following approach: (1) describe the historical conditions affecting development of the maritime industry; (2) describe the prevailing conditions within the maritime industry; (3) assess the ability of the U.S. flag fleet to protect American interests from unfair foreign trading practices; (4) assess the ability of the U.S. merchant fleet to compensate for any withdrawal of foreign flag shipping; (5) assess the ability of the U.S. flag fleet to provide sufficient shipping to support American military efforts during time of war; (6) analyze initiatives on the part of both government and industry to ensure the survival of the U.S. merchant fleet; and (7) develop conclusions and recommendations based on the findings. The following discussions further describe the analysis conditions.

Historical Conditions

A historical background is necessary to lay the groundwork for the study and place the present state of the U.S. merchant marine into perspective. Only by looking at the long history of subsidy and regulation can one get a sense of the interplay of political and economic factors at work.

All of the parties involved, government, management, and labor have in turn contributed to the decline of the U.S. flag fleet. By understanding these missteps, it is possible to devise new options to correct them and put the industry once again into a competitive position in the world market.

Prevailing Conditions

Having established the background for the deterioration of the U.S. flag fleet, the study then examines its place in today's world. Current economic and national security climates faced by the maritime industry are examined.

In today's world, U.S. shipping must compete not only with other nations for cargo, but also for support at home. The maritime industry has become almost wholly dependent on government largess for its continued survival; particularly subsidies various kinds. As the budget shrinks and purse strings tighten, it will become increasingly difficult to justify massive outlays to support private

enterprise. Furthermore, dissolution of the bipolar world has reduced the apparent significance of the maritime industry's contribution to national security.

Protection From Unfair Trading

The study first examines various trading practices which may be termed "unfair", including those instituted by industry, as well as those imposed by governments, and the means available to combat them. A number of political avenues are available to the government, but for the merchant fleet to provide any leverage against unfair trading practices it must first be able to compete and, second, it must have a considerable impact on the marketplace. The study then examines the potential impact of the U.S. fleet in international commerce and its potential to expand into new markets. Finally, the ability of the fleet to withstand increased competitive pressure from foreign shipping is examined through a series of case studies.

Reserve Shipping Capacity

To determine the ability of the maritime industry to react to the sudden withdrawal of foreign shipping from U.S. trade, the study first looks at the surplus shipping available in the U.S. fleet, and the potential of the industry to reorder its assets to take advantage of additional cargoes. Finally, the study examines the number

of potential competitors ready to share in the newly created markets.

Military Employment of Commercial Shipping

This function of a U.S. flag merchant fleet is the most oft used argument for government support of American shipping. Changes in national security requirements, however, are challenging the need, even the desirability of maintaining a merchant marine under this premise. To address this issue the study assesses the capability of the merchant marine to provide: (1) militarily useful shipping; and (2) a sufficient number of qualified mariners to man them.

The issue of manning is particularly important for a number of reasons. First, the manpower pool is shrinking. Second, not only will mariners be required to fill billets on civilian ships, but the MSC requires a significant number to man both the Naval Fleet Auxiliary Force (NFAF), and due to a recent change in naval manning, Combat Logistics Force (CLF) ships in direct support of the Navy. In time of emergency, the MSC will require substantial additional manpower to support activation of the RRF and possibly the National Defense Reserve Fleet (NDRF).

Government and Industry

In the end, it will come down to the ability of government to create an environment in which shipping companies can continue to operate; either subsidized or

equally competitive with foreign fleets. For its part, industry must move towards improved efficiency and incorporation of advanced technology. At this stage the study reviews current and proposed maritime policy, and initiatives available to improve efficiency and productivity within the industry.

Conclusions and Recommendations

The final analysis is directed at answering the primary and secondary research questions. In light of fiscal and governmental restrictions, the physical capabilities of the merchant fleet are compared with the roles of a national flag merchant fleet to resolve the primary question: In today's world, does the United States need a U.S. flag merchant marine? The study also provides insights into what specifically is needed in a U.S. merchant marine.

CHAPTER FOUR

HISTORICAL CONDITIONS

In the definition of the sea power of the state we include as the main components . . . the status of the merchant and fishing fleets and their ability to meet the needs of the state Of course, the character of the use of the ocean and the degree of development of these components are ultimately determined by the level of economic and social development reached by the state and the policies it pursues.¹

S. G. Gorshkov, The Sea Power of the State

Since its early days, the United States has been a seafaring nation. Both fisherman and merchants had plied their trades in local and distant waters since the first settlers had arrived from Europe. Following independence, the first substantive legislation passed by the young government was a protectionist measure requiring American construction and registry of merchant vessels and offering tax abatement for cargoes arriving in American hulls.² Unlike today, American ships were less expensive to build than those available in Europe, and American shipyards remained prosperous until around 1830.

About 1830, demand turned toward larger ships which the smaller U.S. shipyards could not produce efficiently.

Shortly afterwards, the development of steam propulsion and iron hulls, and their incorporation in merchant ships led to the first great decline of the American maritime industry.

American vessels had always been cheaper to build than European ships because of the abundance of locally available timber. As forests were depleted, costs began to rise. When, in the 1850s, European owners demanded ships made of iron and steel, American industry could not respond. Not only were there very few yards capable of building steel ships, but American steel production, dependent on imported raw materials, could not provide steel at competitive prices. As a result, the U.S. merchant fleet, employing wooden sailing ships, began to lag behind technologically advanced foreign fleets. The shipbuilding industry too began its decline. Despite this turn of events, and the situation it forebode, as late as 1900, about 50% of the shipping built in this country was constructed of wood and 42% powered by sail.³

As early as 1845, Congress offered subsidies to American shipping lines, to stimulate new trade and preserve U.S. maritime interests. Although well intentioned, the subsidy program succeeded only in increasing the income of the subsidized shipowners leading to near universal public disaffection for subsidy programs.

Although the merchant fleet had begun a serious decline by the mid 1800s, the expansion that had taken place

following the War of 1812 had positioned the U.S. in direct competition with Great Britain on world trade routes. As late as 1861, the American merchant fleet stood at just over 5.5 million tons while Great Britain's was only slightly more at 5.8 million tons; the remainder of the world's fleets totalled an additional 5.8 million tons.⁴

The disruption caused by the American Civil War, while not the catalyst for the decline of American merchant shipping, was a major contributor to its severity. Loss of life and ships during that war severely reduced the size of the fleet. In an effort to protect their interests from Confederate raiders, many shipowners adopted flags of convenience. While this practice had been exercised briefly during the War of 1812 as a protective measure against British attacks, the advantages accrued during the Civil War period prompted a major shift of flags in the immediate post-war years. Over the course of the war, the US foreign trade fleet shrank from 2.5 to 1.5 million gross tons.⁵

Following the war, the nation's interest was focused on reconstruction and expansion into our western regions. The major markets for American goods, were within the United States itself. Investment capital was directed toward railroads not shipping. As a result, what American exports existed found their way into foreign hulls.

The overall decline of U.S. foreign trade during this period is displayed in Table 1.

TABLE 1

U.S. OCEANBORNE FOREIGN TRADE 1840-1882

Year	Tonnage Foreign Trade	US Flag Tonnage	% Total
1840	762,838	632,392	82.9
1845	904,476	738,956	81.7
1850	1,439,694	1,043,778	72.5
1855	2,348,352	1,775,358	75.6
1860	2,373,396	1,581,633	66.5
1865	1,518,350	420,583	27.7
1870	1,448,846	515,789	35.6
1875	1,515,998	391,127	25.8
1880	1,314,402	228,705	17.4
1881	1,297,035	207,525	16.0
1882	1,259,492	195,221	15.5

Source: J.D. Jerrold Kelley, The Question of Ships: The Navy and the Merchant Marine. (New York: Charles Scribner's Sons, 1884), 189.

The gravity of the situation had not been totally lost on the government. The Secretary of the Navy in both his 1882 and 1883 annual reports suggested the creation of a "Bureau of Mercantile Marine" within the Department of the Navy.⁶ A report presented to Congress in 1882 concluded:

Any nation which relies on another nation for its supply of ships loses in time of peace its commercial independence, and in time of war places its very existence at the mercy of the powers which command the ocean.

Summing up the state of the US merchant fleet in 1884, LT

J.D. Kelley wrote:

At present we have few modern ships; there is no school afloat in which merchant sailors can be trained, and the 60,000 seamen we had at the beginning of the war have disappeared. . . . As a last word, it must be emphasized that even if our shipping were restored, we have neither the men nor the officers to man it . . .

Three events over the next 20 years would prove to the nation just how prophetic these pronouncements were: the Spanish American War, the Boer War, and the sailing of the Great White Fleet.

The Spanish American War, although of short duration and wholly successful, brought to light the shortcomings of the American merchant fleet. Even though the island of Cuba lies only 90 miles from Florida, there was insufficient shipping available to transport US forces to the island. To prepare for the expedition to Santiago de Cuba, the Army and Navy were forced to charter every available vessel on the east coast; 36 ships, 90,000 gross tons.¹⁰ Even so, foreign ships were chartered and purchased by the Navy to meet requirements for troops and coaling. Transport of troops to the Philippines required passage of emergency legislation to approve the transfer of British ships to U.S. registry.¹¹

When the Boer War broke out in 1899, Britain pulled a large percentage of her merchant shipping out of the trans-atlantic trade to support the war effort in South Africa. As a result, services declined and freight rates soared, leading a Congressional committee to state that American commerce had funded the war.¹²

President Theodore Roosevelt, a firm believer in sea power, sponsored construction of a new fleet to help establish the U.S. position as a major power, contributing significantly to expansion of the nation's shipbuilding

base. When "The Great White Fleet" sailed, however, the American merchant fleet was unable to supply it with the necessary colliers and support ships. This grand demonstration of American sea power was trailed by a "motley array of colliers, tankers, and tenders bearing the flags of the world."¹³

The net result of these events were efforts by the President and Congress to bolster the U.S. merchant marine. The main obstacle, however, was the high cost of doing business under the American flag. Expensive American steel for ship construction typically drove up prices for American built ships 40-75% higher than those of European vessels.¹⁴ The debate in Congress was subsidy versus free ships.

Existing protectionist legislation required ships be built in the U.S. if they were to operate under the American flag. When instituted in 1789, it was intended that such measures would support the young shipbuilding industry. Nevertheless, it had become apparent by the early 1900s that more and more owners were purchasing ships abroad for registry under flags of convenience. To support the domestic industry, Republicans urged operating subsidies. Democrats on the other hand, supported free shipping; allowing U.S. registry regardless of a ship's point of origin. Similar arguments continue today.

Prior to World War I, U.S. flag shipping carried less than 10% of the nation's foreign trade.¹⁵ The bulk of

the foreign trade was carried in British and German ships. The withdrawal of belligerent shipping from U.S. markets when war began caused a major shortfall. Most American shipping was engaged solely in domestic trade. Over 500,000 tons of American owned shipping was registered under foreign flags. Rapid passage of legislation authorizing war insurance on American ships and liberalization of registry transfer regulations prompted shifting of over half of this capacity to the US flag by September, 1914.¹⁶

Further legislation, authorizing formation of a government corporation to acquire and operate merchant shipping was introduced by President Wilson in 1914. Some members of Congress, unconvinced of the need or desirability for direct government involvement, delayed its passage until 1916.

The Shipping Act of 1916 established a Shipping Board to oversee the operation of a government shipping corporation. The Emergency Fleet Corporation filled the nations shipyards with orders and created new yards to satisfy demand. Although no vessels were delivered prior to the end of the war, by 1922 the crash building program had increased the size of the pre-war fleet by five times and provided the U.S. with the worlds largest merchant marine totalling 13.5 million gross tons, 22% of the world's total.¹⁷ More than half of this fleet was government owned

and made available for private purchase under the Merchant Marine Act of 1920.

The Merchant Marine Act of 1920 was aimed at establishing new trade routes, transitioning from government to private operation of the emergency fleet, and otherwise promotion of a healthy U.S. flag merchant marine. It has remained the basis for national maritime policy through the present day.

Unfortunately, international shipping rates fell in the early 1920s forcing the government to retain most of its stock of merchant ships. The Shipping Board operated its fleet in the red through 1924. By the late 1920s, Europe, having recovered from the effects of war, and bolstered by shipping rates once again on the rise, was producing new, improved ships. Foreign competition again began forcing the U.S. from the international shipping market.

In response, a number of measures to stimulate the industry were implemented by Congress. A construction fund, which had been established in 1924, was infused with an additional \$250 million to stimulate new construction following passage of the Merchant Marine Act of 1928.¹⁸ The Act also provided a controversial series of lucrative mail contracts which amounted to little more than thinly disguised subsidies. None of these attempts were effective in promoting the merchant fleet.

President Roosevelt, in 1935, introduced legislation which was to become the Merchant Marine Act of 1936. In his message to Congress, the President made clear his intention to ensure a healthy U.S. merchant marine.

An American merchant marine is one of our most firmly established traditions. It was, during the first half of our national existence, a great and growing asset. Since then, it has declined in importance and value. The time has come to square this traditional ideal with effective performance.¹⁹

The goals of the 1936 Act were to check the decline of the U.S merchant fleet and ensure that a significant portion of U.S. trade was carried in U.S. ships (Table 2).

TABLE 2

U.S. OCEANBORNE FOREIGN TRADE 1922-1940

Year	Tonnage Foreign Trade	US Flag Tonnage	% Total
1922	75,450,000	36,394,000	48.2
1924	80,234,000	32,542,000	40.6
1926	100,206,000	31,743,000	31.7
1928	87,799,000	33,434,000	38.1
1930	81,734,000	30,864,000	37.8
1932	52,123,000	18,367,000	35.2
1934	56,337,000	18,555,000	32.9
1936	64,808,000	19,283,000	29.8
1938	74,597,000	19,446,000	26.1
1940	75,962,000	23,204,000	30.5

Source: U.S. Department of Commerce, Maritime Administration, The Handbook of Merchant Marine Shipping Statistics Through 1958 (Washington: GPO, 1959), 163, in John G. Kilgour, The U.S. Merchant Marine: National Maritime Policy (New York: Praeger, 1975), 34.

Importantly, the Act recognized the requirement for direct subsidies to the shipping industry. Both construction and

operating subsidies were made available in an attempt to achieve cost parity with foreign flag shipping, something the industry had been requesting since 1915.²⁰

To insure the government's interest in merchant shipping, the Navy was required to review plans for all subsidized ships constructed under the Act, and recommend national defense features for inclusion. The Act laid the necessary ground work for the massive shipbuilding effort which was required at the start of World War II.

When war broke out in Europe in 1939, American shipping was curtailed because of the requirements of the Neutrality Act. One third of U.S. foreign trade fleet was initially laid up. During this period, the government encouraged shipowners to transfer registry of their vessels to legally continue trade with England.

The newly formed Maritime Commission's construction program aimed at producing 50 ships per year had begun in January of 1939. Events in Europe accelerated the procurement process such that by the end of the year, 139 were under construction. Prior to America's entry into the war, about 6 million deadweight tons (dwt) of shipping were under contract.²¹ All told, more than 5000 merchant ships were delivered between 1942 and 1945.

Following the war, the U.S. possessed 60% of the world's merchant tonnage. American industry purchased 823 surplus ships through 1950, an additional 1100 were sold to

foreign countries, and the remainder were transferred to a newly established National Defense Reserve Fleet (NDRF).²² Those ships sold overseas helped rebuild losses suffered by our allies during the war, principally France, Norway and Denmark. The English merchant fleet was completely restored to its pre-war level.

Despite the achievements of the maritime industry during World War II, construction and labor costs continued to plague American shipping companies. Although the U.S. merchant marine remained strong throughout the post war years and into the 1950s, it became dependent on U.S. military and foreign aid cargoes reserved for shipment in American hulls. In fact, these shipments represented virtually the entire source of income for the U.S. flag tramp fleet.

Government preference cargoes represented an important indirect subsidy to the shipping industry. Without such preference cargoes, the expense associated with conducting business under the American flag was simply too high for most companies to compete in the international market.

High labor costs have been a recurring theme in the struggle to maintain a U.S. flag merchant fleet. In 1872, Scientific American reported that an American first class engineer and ordinary seaman earned \$240 and \$40 per month

respectively compared to \$80 and \$12.50 per month earned by their English counterparts.²³

At the start of World War II, American wages were about 50% higher than those paid in major European fleets. Drastic wage increases occurred during the war as war risk compensation and to cover inflation. Wage scales were not readjusted following the war, therefore; post-war wages started out at an artificially inflated level and simply continued to grow. By the 1960s, wages had increased to 3-5 times greater than those paid on foreign ships, and in 1964, an able seamen earned about twice that of a U.S. factory worker.²⁴

A major portion of today's labor costs stem not from simple wages, but from overtime, benefits such as paid vacation time and medical care, and union work rules. Maritime unions have historically been aggressive at the bargaining table. They maintain strict work rules regarding crew size, watch standing, and job description. While they have served a valuable purpose in improving working conditions for their members, they have played an equally large role in high labor costs within the U.S. maritime industry.

However important, wages are not the only factor influencing labor costs. Improvements in habitability have been legislated by the government. Many work restrictions

are imposed by Coast Guard or Maritime Commission regulation.

Similar factors exist in the shipbuilding industry as well and contribute to the high cost of U.S. shipping. The bottom line is, it is more profitable to operate under a flag of convenience.

To cut costs and remain competitive, American ship owners continue to transfer their assets to flags of convenience which have come to be known as "flags of necessity". American owners control 26.3% of the world's shipping, most of which is registered under a flag of convenience.²⁵ From 1952-69, domestic shipyards delivered 329 merchant ships (6.8 million dwt) to American owners. Foreign yards delivered 438 (21.8 million dwt) to American owners, destined for registry under a flag of convenience.²⁶

Operation Desert Storm

In the past, the United States has relied heavily on its civilian maritime industry, shipowners, and merchant mariners, to provide required transport for men and material during time of war and the private sector has always answered the call. The most recent employment of the merchant marine in a major military deployment was during Operation Desert Storm.

Between August 14, 1990 when the first ship, USNS *Capella* (T-AKR-293), departed Charleston, SC, and the end of January 1991, 2.3 million short tons of dry cargo, .6

million short tons of containerized freight, and 4.2 million short tons of petroleum products had been shipped to Southwest Asia²⁷. The delivery of such an enormous amount of material to a theater of operations 12,000 miles away was no small achievement. The superficial success of the sealift campaign during Operation Desert Storm, however, belies the true state of both our merchant marine and military sealift capability.

While initial surge shipments of supplies for the Gulf War arrived on time or in some cases, early, follow-on shipments were frequently late prompting public criticism from General Norman Schwarzkopf, Commander, U.S. Central Command²⁸. The most obvious issue raised was the ready availability of shipping to support the build up of forces in the Gulf.

Much of the government-owned shipping intended to support military contingency operations is contained in the RRF. Unfortunately many of these vessels were of the wrong type and proved to be of no value to the modern force we were sending to the Gulf. Others were simply too old and tired to be of use. Inadequate maintenance and infrequent activation drills were contributors to extended response times.

Manning the ships which were successfully activated also proved to be a problem. Former Secretary of Transportation Samuel K. Skinner was quoted as saying

"putting less than half of the emergency fleet in service has nearly exhausted the nation's supply of merchant mariners."²⁹

Supplemental shipping was chartered from US carriers when available; however, the numbers and types were insufficient to meet demand. Of 73 commercial vessels chartered during the first three months following the invasion of Kuwait, 47 were of foreign registry³⁰.

The pace at which modern war can be waged requires an uninterrupted flow of supply. Had Iraqi forces chosen to strike into Saudi Arabia before we were capable of building up our forces, the final outcome of the war may have been quite different. Saddam Hussein very obligingly allowed us five months to develop overwhelming combat power in the gulf region, our next adversary may not afford us that luxury.

Sealift operations during Desert Storm were conducted in a very benign environment. Despite possession of a navy (albeit a small one) and aircraft capable of carrying Exocet anti-ship missiles, Iraq never opposed the movement of coalition shipping into the gulf region. Had shipping come under attack, it is questionable how many foreign ships would have been made available. Any attrition of the sealift fleet would have been irreplaceable.

The condition of the American maritime industry was highlighted by its performance during the Gulf War, both its

achievements and shortcomings. While some steps have been taken to improve military sealift capability, the U.S. flag merchant fleet continues in decay.

CHAPTER FIVE

PREVAILING CONDITIONS

As of September 30, 1992, 386 privately owned ships made up the U.S. flag oceangoing merchant fleet. Of these, only 348 were in an active status; 10 were awaiting cargo or maintenance, while 28 were laid up as excess.¹ The U.S. merchant fleet today ranks 10th in the world in total tonnage (19,716,000 dwt) and 16th in number of ships (Table 3).

American shipping generated \$12.6 billion in balance of payment receipts in 1992.² Today, only eight companies offer liner services under the U.S. flag.

Legislation

The fortunes of the U.S. maritime industry have historically been intimately linked to support or indifference from Washington. Countless pieces of legislation have been enacted for the purpose of regulating or promoting the merchant fleet. These have included protection measures such as cabotage laws and cargo preferences, as well as loans, and subsidies. Although well intentioned, much of this legislation has been so encumbered

with requirements and restrictions that it has been of only minor assistance and in some cases damaging.

TABLE 3
MAJOR MERCHANT FLEETS OF THE WORLD 1992.

COUNTRY	RANK BY TONNAGE	TONNAGE	RANK BY NO. SHIPS	NO. SHIPS
Liberia	1	94	2	1550
Panama	2	75	1	3040
Greece	3	43	6	914
Norway	4	38	7	770
Cyprus	5	36	4	1210
Japan	6	33	5	944
Bahamas	7	31	8	756
British Dependent Terr	8	24	9	712
China	9	21	3	1359
U.S.	10	20	16	394
Malta	11	15	10	640
Singapore	12	14	13	478
Philippines	13	13	11	536
Korea	14	11	14	445
Italy	15	10	12	493
All Others		175		9702

Source: Maritime Administration, 1992 Annual Report (Washington: Department of Transportation, 1993) 14.
Oceangoing merchant ships of 1000 gross tons and over.
Tonnage in millions of tons.

Consistent with this tradition, a number of proposals have been submitted to the Congress in recent years to help shore up the maritime industry. HR 1109, the Merchant Seamen Reemployment Rights Act of 1993, sought to provide job security to civilian mariners returning from service in government owned or chartered vessels during mobilization for war or national emergency.³

HR 2151, The Maritime Security and Competitiveness Act, would have made significant funds available to ship owners willing to contract with the Department of Defense (DoD) to make their ships immediately available in time of national emergency.⁴ Funding under HR 2151 would replace the present Operating Differential Subsidy (ODS) program which expires in 1997. That program currently provides operating subsidies for 85 ships engaged in foreign trade. ODS payments in FY 92 totalled \$215.7 million, about \$2.5 million per subsidized ship.⁵

The question of funding for HR 2151 has not been resolved. Potential sources for the estimated \$200-250 million price tag include the DoD budget; however, DoD spokesmen have stated that the Department has "not decided whether sustaining a merchant fleet was worth the cost."⁶ Furthermore, DoD has indicated that by 2005, its new fleet of sealift ships would be available and it would require only 25 merchant ships from industry.⁷

HR 2152 would expand an ongoing tax deferment program to encourage investment in new ships.⁸ Similarly, legislation has also been proposed that would provide guaranteed loans for shipyard modernization as well as subsidies for new construction in U.S. yards. To date, none of these proposals has been enacted.

In contrast to the promotional efforts offered by some members of Congress, other segments of the government

have been considerably less supportive. A document, based on Vice President Gore's National Performance Review (NPR), proposed numerous sweeping changes to government support for the maritime industry. Included in the proposal were such things as elimination of all subsidies and preference cargoes, closure of the U.S. Merchant Marine Academy at Kings Point, N.Y., and repeal of the "Jones Act", which restricts foreign shipping from U.S. coastal trade.⁹ In one stroke then, the NPR would remove both the life support measures of the foreign and coastal trades and close a primary source of trained maritime officers. Senator Ernest Hollings' (D-SC) response to the proposal was, "If these programs were to be eliminated, there would be nothing left of the U.S. maritime industry."¹⁰

The document was never released due to the controversy it inspired. In an effort to calm some of the debate, what was finally made public was a recommendation to form an independent commission to study "the future of the maritime industry in the United States and the benefits derived by the taxpayers from maritime industry subsidies and related issues."¹¹

What has remained elusive is a policy which acknowledges the special situation of international shipping. In response to applications made by Sea-Land Services and American Presidents Lines, the two largest shipping companies under the American flag, to transfer

their registries, Congress has elected to impose a one-year moratorium on such moves rather than take proactive steps toward maritime reform. In response to congressional action, Senator Breaux (D-LA) responded "The answer is not to let them all go financially under just to force them to stay here."¹² Transfer of the 20 vessels proposed would result in loss of about 850 jobs and 5% of remaining American flag ships.¹³

The result of this action on the part of Congress may well prompt additional transfers once the moratorium is lifted. MARAD has estimated that loss of these carriers plus the present downward trend in liner services, could result in a U.S. container fleet of only 18 ships by 2005.¹⁴ Lykes Lines, a third major U.S. company, while not planning to reflag its fleet, has begun leasing foreign flag ships to service its trade routes. Lykes' move is in anticipation of phasing out its old ships with no other economical replacement option.¹⁵

The decline of the U.S. merchant fleet has had an impact beyond just losses to ship owners. In 1992, the average monthly employment in seafaring jobs was 14,446, down by almost 2000 from 1991.¹⁶ Declining job opportunities has of course increased competition for those jobs that remain available. Many experienced mariners are forced to find work elsewhere and unions, whose membership is already short of work, restrict new memberships, limiting

the number of future seamen. Many graduates of the nation's maritime academies are electing to serve active duty time in the Navy as an alternative career.

Former Secretary of Transportation, Andrew Card had proposed several initiatives aimed at invigorating the merchant fleet in 1992. These included a Contingency Retainer Program (CRP), loosening of buy American restrictions on use of Capital Construction Fund monies, immediate eligibility of foreign built, U.S. flag ships for preference cargoes, and relaxation of American only ownership requirements to attract foreign capital and joint ventures.¹⁷ His 16 point plan was applauded by shipowners, denigrated by the shipyards, and ultimately died prior to the presidential election because funds for the CRP could not be found.

The present state of the maritime industry is such that often adversarial parties have joined forces. Almost unheard of twenty years ago, maritime unions and shipowners have called a truce and are working towards the same goal; preservation of the industry. The two largest shippers in the country, Sea-Land (unsubsidized) and American Presidents Line (subsidized), usually possessing divergent interests, have presented Congress with a united front demanding comprehensive overhaul of the nation's maritime policy.

Liner shipping has suffered considerably over the past decade due to overtonnage on a number of trade routes.

This has led to freight rates so depressed that some articles travel below cost. One particular route between the U.S. and Europe has cost operators about \$400 million per year.¹⁸

Protection From Unfair Trading

Numerous factors influence the performance of shipping in international commerce. Contrary to the American ideal of free markets and perfect competition, the shipping industry is highly regulated both from within and without.

Within the industry, "liner conferences" have traditionally regulated competition to ensure profitability among their members. Similarly, governments have traditionally regulated commerce through imposition of laws and tariffs, in support of their own fleets and the often, the exclusion of foreign competition.

Liner Conferences

Unfair trading practices generally refer to actions instituted within the maritime industry itself to limit competition and secure or maintain a market segment. The most obvious source of such practices is the shipping conference system.

A shipping conference is "any type of formal or informal agreement between shipowners that restricts competition."¹⁹ First instituted about 1880, by 1900 most

of the world's trade routes had been organized into conferences.

The goal of conferences is to eliminate price competition between its members and fix minimum freight rates over certain trade routes above what might be achieved in an open market. Following are the four principal means available to the conferences for achieving their goals:²⁰

1. Closed Conferences. One way in which to limit competition and thus exercise a modicum of control over freight rates is to restrict the number of companies operating on a given trade. Closed conferences limit their membership and so control competition. Through combined action, the conference can drive non-members out of a trade in a number of ways. The conference can employ "fighting ships" whose sole purpose is to undercut the competition. Placed in direct competition with another carrier (same port, service, etc.), the target line must cut prices and absorb its own losses while losses incurred by the fighting ship are borne by the entire conference. Similarly, the financial resources available within the conference can help support its members in the event it must cut prices, such as during an all out rate war.

2. Rebating. Rebating has proven to be such an extremely effective way of limiting competition that it has been outlawed by numerous countries including the United States. In exchange for exclusive use of conference

shipping, shippers are granted lower rates (dual rate system). Alternately, a significant portion of the freight costs are refunded to a shipper who uses conference carriers (deferred rebate system). The rebate system has been described "primarily as a bribe, partly as a menace, inducing shippers to do business exclusively with members of the conference."²¹

3. Rationalization. The justification for large ships (such as the super tankers) is to take advantage of economies of scale, i.e. more cargo per sailing. If a trade route becomes crowded, the available freight must be divided among more carriers, incurring diseconomies. To prevent this, the conference limits the number of sailings over its trade routes seeking to fill each ship, thereby maximizing income per trip.

4. Cargo Pooling and Joint Services. In order to ensure profit (or minimize losses) a conference may allocate cargoes along its trade routes among its members. It may also pool its resources, including finances and cargoes to protect its membership.

Both the Royal Commission (U.K., 1904) and Alexander (U.S., 1914) Reports concluded that conferences were "the most efficient and reliable institution capable of organizing ocean transportation."²² Conferences generally do not fit the American ethic of free markets and fair play; however, and have, therefore, been the target of anti-trust

legislation. Since passage of the Shipping Act of 1916, closed conferences, "fighting ships", and rebating have been illegal business practices within the U.S. maritime industry.

U.S. law does permit the institution of open conferences, those which extend membership to any interested party. While providing some degree of rate stabilization, these organizations have done little to promote self-sufficiency within the U.S. fleet. Arguably, open conferences promote overtonnage because there is no membership restriction; any interested company can join and thereby gain access to what may already be trade routes supporting excess tonnage. This results in inefficiencies, a smaller share per company, and narrower profit margins. Because of limited representation in the legal conferences, American interests are easily subordinated to those of their European and Japanese competition.

Recent studies show that closed conferences still promote more efficient operation than U.S. mandated open conferences. Hapag-Lloyd, a major German shipping firm, reported that in 1975, 7 lines operating 36 ships in the North Atlantic in an open conference averaged only 68% capacity in 76 weekly calls. Computer simulations of a rationalized environment suggest that only 16 ships making 33 calls could operate at 85% capacity.²³ Conference

members could operate more efficiently, still generate a profit, and theoretically, freight rates would be reduced.

The emergence since 1961 of a trend toward consolidation has produced a number of "superconferences" formed through the merger of several smaller conferences. The Latin American Freight Conferences (LAFC), for example, was formed that year through the merger of 11 pre-existing organizations. Such change underscores the disadvantage at which U.S. lines must operate. Of the 31 carriers represented in LAFC, only three were U.S. lines.²⁴ American participation in the superconferences is depicted below.

TABLE 4

Superconference Membership in
Foreign Trade of the U.S.

Superconference	Foreign Lines	US Lines
Great Lakes Overseas Freight	12	0
Latin American Freight	28	3
Associated Latin American Freight	18	7
East Coast of South America	15	2
Pacific Coast Committee of Inward Trans-Pacific Steamship Lines	18	5
New York Committee of Inward Far East Lines	25	6
Gulf Associated Freight	26	5
Trans-Atlantic Associated Freight	48	8
Pacific Coast European	22	2

Source: U.S. Congress, House Committee on the Judiciary (Celler Committee) Report of the Anti-Trust Committee, The Ocean Freight Industry, 87th Cong., 1962, p.53 in Alan W. Cafruny, Ruling the Waves (Berkeley: University of California Press, 1987) 120.

Another effective means by which foreign shipping companies can optimize their operations, thereby retaining profitability, is through various consortia arrangements. Eurosal (Europe-South American Lines), a consortium of European and South American lines, was formed to introduce large, modern, containerships to the trade routes between Europe and the west coast of South America.²⁵ The resultant efficiency reduced costs associated with the operations of numerous smaller vessels. Similarly, Atlantic Container Line was formed in 1965 to operate container vessels on North Atlantic trade routes.²⁶ By the end of the decade, consortia were operating on all of the major trade routes.

The inherent benefits of such schemes are obvious. While competition appears to be reduced, each partner is guaranteed a "piece of the action." Such arrangements minimize individual capital requirements for new ships and equally important, capital risk is minimized as well. A 1982 General Accounting Office (GAO) report concluded:

As advances in containership technology produce even larger, more costly vessels, the continued successful operation of the fleet may require that U.S. flag companies form consortia similar to those formed by Japanese companies. These arrangements, in which capital resources are pooled, would enable U.S. operators to acquire the equipment needed to compete effectively against foreign-flag consortia while retaining the possibility of interline competition.²⁷

The report went on to recommend that Congress consider modifying the anti-trust laws which currently prevent such activity.

While anti-trust legislation protects domestic industries from unfair practices between themselves, its unilateral imposition on the U.S. merchant marine has limited its ability successfully to compete internationally. Restrictions on conferencing are just one example. Possibly the most bizarre excursion into monopoly busting resulted from passage of The Panama Canal Act of 1912. Under conditions of the act, ships owned by railroad companies were excluded from use of the canal while other American and foreign shipping were accorded free access.²⁸

Regulation

Since all governmental measures combine to shape the playing field, the important competition in international trade actually occurs between governments and not individual shipping lines.²⁹ The U.S. government must ultimately decide whether our merchant fleet will be permitted to compete on equal terms with other fleets of the world.

Governments may employ various programs of trade or flag discrimination to promote their own industry and, conversely, penalize foreign flag shipping. Such practices as higher tonnage duties, higher user fees for navigational aids and port facilities, and surcharges on goods imported in foreign vessels are examples of such programs.

Prior to 1817 when foreign vessels were legislatively excluded from American coastal trade, tonnage duties on foreign vessels were so severe, that foreign

shipping was effectively economically excluded.³⁰ In 1970, Congress again passed legislation authorizing a discriminatory duty on foreign shipping. Its implementation, however, has been reserved for retaliatory use against nations found discriminating against U.S. shipping.³¹

In addition to severe duties, The Trade Act of 1974 provides the President with further means to retaliate against discriminatory nations. The federal government has interceded on behalf of the maritime industry with Japan, South Korea, Taiwan, and the People's Republic of China to resolve discrimination issues.³² The Ocean Shipping Act of 1978 allows the Maritime Commission to suspend the rates of state-owned carriers if they are found to be "unjust and unreasonable" (i.e., too low).³³

Government intervention in shipping has not been limited to external issues. Internally, shipping is among the most highly regulated of American industries. Various interests including shipowners, shipyards and unions compete for legislative favor, often at cross purposes. The results have been less than satisfactory, frequently neglecting overarching national interests.

The biggest, and most politically contentious hurdles for the American shipping industry have historically been "buy American" requirements. Since the 19th century, the shipping industry "has been burdened with the task of

supporting the domestic shipyards."³⁴ This requirement has since been restated in numerous pieces of legislation, and has only recently been relaxed. The long term result, however, has been to force American companies to purchase ships at substantially higher cost than those available on the open world market.

In 1982, the cost of a containership of 2500 container equivalent units (CEU) in a U.S. shipyard was about \$118 million. Its equivalent constructed in a Japanese yard was about \$61.5 million.³⁵ Under the guidelines of the Merchant Marine Act of 1970, that ship would have been eligible for a construction differential subsidy (CDS) of up to about \$40.4 million (35% maximum); resulting in a final price tag of \$16.1 million more than the Japanese built ship. Beyond the cost, the American ship, if built with CDS, would be subject to considerable government regulation regarding operations and ultimate disposal.

When initially conceived, "buy American" was intended to protect America's burgeoning shipbuilding industry. At the time, it posed no problem to the shipping industry, because American ships were considerably cheaper than those built overseas. Over the period 1800-1840, American built ships cost about £3-4 per ton, while English built ships cost £5-7.³⁶ The switch to steam power and iron/steel construction in the 1850s rapidly turned this

cost differential against American industry. Despite the continued disparity between U.S. and foreign construction costs, the government has remains reluctant to lift the domestic construction requirement, preferring instead to offer a program of construction subsidies.

In 1982, Congress allowed American shipping companies a one time opportunity to purchase ships overseas for operation under the American flag. As a result 30 modern, diesel powered ships were added to the fleet.³⁷ Similarly, Mormac Marine Group requested permission in 1988 to obtain several foreign built tankers "because it was impossible to compete in the worldwide market with U.S.-flag ships."³⁸

Apart from simply higher construction costs (i.e., materials, wages), the U.S. government further widens the construction differential through its imposed safety requirements. The U.S. and all other maritime nations are signatories to the shipbuilding standards of the International Maritime Organization and the Safety of Life at Sea treaty. All ships built in this country comply with those standards. American built ships must also conform with additional regulations imposed by the U.S. Coast Guard. It has been estimated that these additional requirements add 10-15 percent to the cost of ship construction.³⁹

Similar legislation requires that U.S. flag ships undergo maintenance and repair (except for emergency

measures) in American shipyards. Repairs conducted outside of the country are subject to a 50% ad valorem tax, "encouraging" use of American yards.

A similar situation exists with regard to manning. All ship's officers and at least 75% of the crew must be U.S. citizens to qualify for American registry. This requirement originated with passage of the Seamen's Act of 1915 which, in response to pro-white labor unions, required that 75% of the crew speak English.⁴⁰

The influence of labor unions has had considerable leverage over the cost of sailing under the American flag. While frequently improving the lot of their membership, unions have just as often made inordinate demands on management. Wages and benefits of the American mariner have been the world's highest since before the turn of the century.

The decline of the American merchant fleet has not been altogether lost on the unions, however. In recent years, numerous concessions have been made regarding wages, manning levels, and work rules in the interest of preserving remaining jobs.

The average annual wage increase for an able seaman since 1990 has been 4.5% on the East coast and 3.2% on the West coast.⁴¹ Work stoppages, once the union's primary weapon against owners, have become a thing of the past. The

new spirit of cooperation was annunciated by Paul Hall,
President of the Seafarers International Union in 1973:

If the maritime industry is to be rejuvenated, there must be no strikes, no work stoppages, no interference with the flow of ships and their cargo . . . cooperation among labor, management, and government is the key to survival of the maritime industry."

Despite this new direction for the unions, high wages for American labor are a way of life. As recently as February 1991, a diesel powered ship requiring a 21 man U.S. crew had an average per diem wage cost of \$8500; a comparable Japanese ship (requiring a crew of only 17), \$5000; and a Panamanian ship (17), \$1900.⁴³ This translates to a per man cost of \$404, \$294, and \$111 respectively. Even though operating costs may be reduced through future manning reductions, American shipping can never hope to match the low wage costs of Panamanian ships or those of emerging third world nations which may be even less.

Government recognition of the high cost associated with American labor led to the institution of operating differential subsidies (ODS). Although thinly disguised operating subsidies had been employed for years, ODS was formally established with the passage of The Merchant Marine Act of 1936.

When first enacted, the rules associated with ODS were so restrictive that many companies rejected the subsidy system; only about 50% of American shipping being subsidized. By 1959, however, all lines eligible for ODS

had applied for them.⁴⁴ Today, Sea-Land Services is the only company offering liner services that remains unsubsidized. The cost of doing business under the U.S. flag, however, may soon force them to foreign registry.

Regardless of how well intentioned these efforts were, the net result has been to reduce the size and efficiency of the privately owned U.S. merchant fleet. "Buy American" requirements have restricted orders for new ships; the *R.J. Pfeiffer*, delivered in 1992, was the first oceangoing merchant ship delivered from a U.S. shipyard since 1987; only one new order was placed in 1992.⁴⁵ Similarly, manning requirements instituted to guarantee American jobs and aggressive union efforts to improve wages and working conditions have presented shipowners two alternatives; reliance on government subsidies which neither encourage innovation nor productivity, or transfer to foreign registry. The end result is an industry handicapped by its support measures, or no industry at all.

Case Studies in Competition

The Japanese Rate War

The Japanese merchant fleet effectively ceased to exist during World War II. During the U.S. occupation, 100% of Japanese trade was carried in foreign ships. Four Japanese lines began operation in August of 1951 and were joined by four more in 1952. These first Japanese lines were charged by the government with regaining Japan's

pre-war position as a maritime nation and were given an initial goal of carrying 60% of the country's trade. By the end of 1952, they were carrying 49%.⁴⁶ This remarkable recovery was accomplished through massive government subsidy, for both construction and operations, and rebating to lure business away from the established conferences.

Recovery of Japanese trade was of course at the expense of both conference and non-conference carriers, in particular Isbrandtsen Lines. Operating outside of the conference system, Isbrandtsen aggressively maneuvered within the market and cut costs to earn both a 10% market share, and the animosity of both the Japanese and the conferences.

In 1953, the Japanese lines and shipping conferences agreed to lift their formal rates and initiate open competition in the hopes of driving Isbrandtsen out of the transPacific trade. Rates dropped as much as 80% below former conference rates. Isbrandtsen lost \$3 million in 1953 and \$4 million in 1954, eventually being driven out of the trans-Pacific trade.⁴⁷

However, the war did not end there. The Japanese shipping lines unofficially "arranged" to fix freight rates in 1955. When the rate war ended in 1958, the Japanese controlled 52% of their own foreign trade and had expanded into what had previously been almost exclusively American trades in the Caribbean and Atlantic.⁴⁸

Through a combination of generous government support, rebating, and "such similar under-the-table dealing," the Japanese shipping industry was able to rapidly achieve significant standing in international commerce.⁴⁹ American operators, however, could not compete against the financial support of the Japanese government or U.S. anti-trust legislation. Subsequently, the U.S. fleet lost a considerable percentage of a once lucrative market.

American Export Line

American Export began to enter the container market in the late sixties and had obtained CDS to assist in construction of its new ships. Its subsequent application for ODS was turned down by the Maritime Subsidy Board, partly at the urging of Sea-Land Services. The line continued with planned modernization but unfortunately was caught short of capital by a rate war which began in 1970.

The rate war involved American Export as well as Sea-Land, United States Lines, Seatrain, and two foreign container consortia. All of the U.S. lines were hurt by the war but American Export, posting losses of \$42 million in 1970, \$58 million in 1971, and \$23 million in 1972, filed for bankruptcy in 1977.⁵⁰

This was only the first instance of U.S. shipping lines facing competition from foreign consortia. Individual American companies, in the midst of transitioning to container technology, with its inherent high infrastructure

cost, were faced with by an organization with huge financial assets. The ability of foreign lines to work together gave them a decided advantage, while U.S. lines remained saddled with outdated anti-trust laws, and high cost ships and labor.

Rate Wars of the 1980s

Seatrain had successfully pioneered intermodalism, direct transloading of containerized cargoes from ships, to railcars and/or trucks, with its "land bridge" linking east and west coast ports. It had also been saddled with extensive debt following an abortive attempt to diversify into shipbuilding. By 1980, the company needed cash to satisfy its creditors and in a vain attempt to attract additional business, Seatrain initiated a North Atlantic rate war. The European competition, however, had grown considerably stronger since the 1970 war. Seatrain lost about \$30 million in three months and filed for bankruptcy in 1981.⁵¹

In 1984, after acquiring several new, large containerships, United States Lines (USL) began to emerge as a threat to its Asian competitors and became the target of a rate war. While its new ships were under construction, USLs foreign competition had been able to accumulate considerable working capital placing them in a favorable position. The ensuing war forced freight prices down by 40%. In the first

nine months of 1986, USL posted losses of \$236 million; filing for protection under Chapter 11 later that year.⁵²

In each of these cases, once solvent American companies were forced into bankruptcy by foreign companies, or consortia. Even Seatrain had been on the road to recovery. The strength of the competition lay in significant cash reserves accumulated in part through participation in the conference system and partly through low overhead and substantial national support. The outcome of each case demonstrates a combination of factors which severely restrict the ability of American ships to compete successfully in the international marketplace.

CHAPTER SIX

EMPLOYMENT

Two of the functions of a national flag merchant fleet are dependent on the number of available ships, not necessarily their size or economic efficiency. The ability to provide reserve shipping for either commercial or military purposes requires that both excess tonnage and manpower be maintained.

Reserve Shipping Capacity

There exist three sources of surplus ships in the U.S.: the Ready Reserve Force, National Defense Reserve Fleet, and privately owned ships currently laid-up due to overtonnaged trade routes/lack of cargoes. The first pool of ships, the RRF is owned by the government and is maintained in varying states of readiness; awaiting crew and ready to sail in 5, 10 or 20 days, depending on degree of activation maintenance required. These ships, maintained by MARAD, provide the Military Sealift Command, the sea component of U.S. Transportation Command, with reserve sealift capacity for use in time of national emergency. In September 1992, there were 97 ships in the RRF with plans for expansion to 140 vessels.

The NDRF is also government owned; however, these ships are considerably older and maintained in greatly reduced states of readiness; requiring 30 days or more to restore to operational status. As of 30 September 1992, there were 209 vessels in the NDRF. Ostensibly for military use, these ships are old, many of World War II vintage, and of limited utility. They do, however, represent a pool of ships which with sufficient lead time, could conceivably be pressed into service, either militarily or commercially, in time of national emergency.

Finally, 28 privately owned vessels were laid-up due to market factors in 1992. These, plus any additional hulls which might be made available through rationalization of existing trade routes or transfer from the domestic trade, represent the U.S. merchant fleet's reserve capacity.

The significance of reserve shipping became apparent at the outset of World War I when foreign ships disappeared from American harbors and cargoes remained at pierside. In 1937, the Maritime Commission stated that the "principal advantage which accrues to our foreign commerce from the possession of a domestic-flag marine is that it provides a measure of insurance against possible interruption of service."¹ Reduction in the size of the active U.S. merchant fleet has substantially reduced that insurance.

Unlike the pre-World War I years, when British ships carried 58% of American commerce, and German and Austrian

ships carried 15%, the current diversification of America's foreign trade (Table 4) is such that with the exception of Liberia, Panama, and Norway, withdrawal of any portion of foreign shipping services would have minimal effect.² The competitive nature of international shipping would ensure that any shortfall could be rapidly assumed by a combination of foreign flags. Some would undoubtedly be filled by American shipping; however, the limited amount of reserve shipping readily available would severely restrict U.S. participation.

TABLE 4
U.S. OCEANBORNE FOREIGN TRADE
TOP TEN FLAGS, 1990

Rank	Flag	Tonnage	% Total
1	Liberia	206.9	24.2
2	Norway	86.7	10.2
3	Panama	84.5	9.9
4	Bahamas	60.9	7.1
5	Greece	57.0	6.7
6	U.S.	34.5	4.1
7	U.K.	29.6	3.5
8	Cyprus	26.1	3.1
9	Philippines	23.9	2.8
10	Singapore	21.0	2.5

SOURCE: U.S. Maritime Administration, United States Oceanborne Foreign Trade Routes, October 1992.
Tonnage in millions.

Liberia, Panama, and recently Norway have become particularly important in U.S. foreign trade because they provide the majority of the tanker and tramp (principally

bulk cargoes; ore, coal, grain, etc.) services to the U.S; 53 and 33 percent respectively in 1990.³ Liberia and Panama have traditionally been flags of convenience and a majority of vessels flying these flags are owned by U.S. citizens. It would not be unreasonable, therefore, to expect that these services will remain uninterrupted. Political upheaval in either of these countries could, however, present a serious threat to U.S. interests. Today, America's privately owned fleet consists of only 24 tankers and 11 bulk carriers engaged in foreign trade.⁴

Military Employment of Commercial Shipping

The argument that the U.S. needs a merchant marine to support its military is nearly as old as the nation itself. As early as 1845, mail contracts were offered preferentially to shipowners who agreed to make their vessels available to the government during time of war. In 1944, General Eisenhower said, "I consider the Merchant Marine to be the fourth arm of our defense and vital to the stability and expansion of our foreign trade."⁵ Despite such efforts and sentiments, the nation has experienced frequent shortages of naval auxiliaries.

Lack of American flag commercial shipping prompted the charter and purchase of foreign ships to support U.S. deployments during the Spanish-American War. When the American Expeditionary Force departed for France in 1917, most of the men and materiel were transported in British

ships. During the U.S. intervention in Lebanon in 1958, foreign shipping again had to be chartered to resupply the Marines.⁶

Recognition of the role merchant shipping plays in national defense has not been limited to the U.S. For example, as the former Soviet Navy expanded in size and reach, Soviet merchant ships regularly provided its logistic support. Consequently, the Soviet fleet was capable of operating for sustained periods in areas where its combatants were denied port access, but merchant ships were free to trade.⁷ By 1971, the Soviet merchant fleet ranked second in the world in number of ships and remained either second or third through 1991.⁸ While this growth may be attributable to several factors, a primary reason was the inadequate support available to the Soviet Navy during the Cuban Missile Crisis of 1962.⁹ Furthermore, it was only through a healthy merchant marine and immediately available shipping that England was able to support its efforts to recover the Falkland Islands and South Georgia. The number of ships taken up from trade (STUFT) for operations in the South Atlantic surpassed 40 and included the Cunard passenger liner *Queen Elizabeth II*.¹⁰

Simply by virtue of its existence, a civilian merchant fleet is available to the government. During peacetime, governments may obtain services through contract shipping arrangements or charter. A considerable percentage

of the cargoes carried in American ships originates with the DoD. In 1991, this amounted to over 9.2 million metric tons; about 10% of the U.S. total for that year.¹¹ Much of this was carried in vessels under charter to the MSC. Such charter arrangements can be expected to continue during time of war or national emergency although the additional requirements of wartime will necessitate considerably more capability than is generally maintained under charter.

A significant problem with the concept of relying on civilian sources for military sealift is that it demands overtonnage within the industry.¹² Ideally, a ship will be full each trip, thereby maximizing its capabilities and, theoretically, its profit potential. Likewise, a shipowner will own only the number of ships he can profitably employ. Overtonnage then equates to shipping which is not returning a profit. Obviously, it is not in the interest of the owner to maintain extensive overtonnage. The U.S. fleet currently has limited overtonnage and in today's marketplace it cannot afford to maintain sufficient capacity to fulfil reasonably anticipated defense requirements.

In an attempt to reduce unproductive tonnage and remain competitive, the current trend is toward fewer, but larger ships, maximizing economies of scale. While small numbers of large ships may be desirable from a business perspective, a large number of smaller ships better support national defense requirements for several reasons. Sheer

numbers allow for attrition of ships, either through mechanical failure or as a result of enemy action: the RRF experienced several breakdowns during Desert Storm; 733 U.S. merchant ships were lost during World War II.¹³ Small ships can take advantage of small, less developed port facilities, such as those commonly found in third world countries and which may be unserviceable by larger ships.

Not only are ships getting larger, but shipping lines have shifted to intermodalism as a means of remaining competitive. Despite its commercial value, intermodalism, and in particular containerization, does not necessarily translate to military efficiency.

While containerization can support most resupply functions, it does not lend itself to all military shipping requirements. Vehicles, the basis of today's mechanized forces, are most efficiently handled with RO/RO type vessels. Ammunition, while it may be containerized, requires significant additional handling in the process. A large number of containerships are non-self supporting, requiring significant port facilities to load or unload. Unfortunately, containerships represent the majority of the U.S. flag dry cargo fleet. As of June 30, 1992, there were 83 containerships in the f 27 RO/ROs, 11 barge carriers (LASH/Seabee), and 44 break-bulk ships.¹⁴

From the above it becomes apparent that commercial and defense utility are not necessarily compatible, not even

the SL-7s (Fast Sealift Ships), acquired from Sea-Land Services, that performed so well during the Gulf War. These ships were originally built as container vessels. Their steam turbine propulsion generating a 33 knot top speed, they established ocean speed records in both the Atlantic and Pacific. In spite of their capabilities, high operating costs, principally due to high fuel consumption, forced them to be laid up. It was their high speed that made them attractive to the government as the basis for a rapid deployment capability. Their container configuration, however, was not suitable for efficient transport of wheeled and tracked vehicles forcing extensive modifications to a their present RO/RO configuration.

The Merchant Marine Act of 1936 recognized the potential divergence of commercial and military requirements and so required that the Navy review the plans and recommend national defense features for inclusion on all subsidized vessels. These features included such things as improved fire fighting capabilities and reserve speed. The passenger liner, S.S. *United States*, built to fill a wartime position as a troopship, had a top speed which was initially classified.

In practice, however, the requirement for defense features was relaxed to the point where the government invested only about \$115,000 on each of 38 subsidized freighters constructed between 1955 and 1960.¹⁵ The last

real effort by the government to effect a commercial/defense hybrid ended with design of the *Mariner* class ship in the early 1950s. By 1963, even the requirement for reserve speed was dropped.¹⁶

Despite the small number of militarily useful ships remaining in the U.S. flag merchant fleet, they remain important to planners, as do flag of convenience ships that are considered to be under effective U.S. control (EUSC). These are ships, registered principally under the flags of Panama and Liberia, which would theoretically revert to U.S. control in time of emergency. Most owners have provided some form of assurance that their ships will be made available.

Unfortunately, most of these ships are bulk carriers or tankers; in particular, very large and ultra large crude carriers (VLCC, ULCC) of little military value. In June of 1981, the EUSC fleet included 481 total ships; 320 tankers and 100 bulk carriers.¹⁷

Reliance on EUSC shipping is a questionable proposition at best. Owners have begun shifting their ships away from traditional flags of convenience because a change in U.S. tax law now levies a higher tax rate on EUSC shipping. By 1991, only 222 ships remained under these registries.¹⁸

In time of declared emergency, the government retains the right to requisition commercial shipping, yet

through all of the conflicts since 1946, it has done so only once. In 1958, two ships were requisitioned to support military operations in Lebanon.¹⁹

To ensure the government ready access to some minimum amount of commercial shipping in time of emergency, the Sealift Readiness Program (SRP) was devised. The SRP is a means by which the government offers shipping companies DoD cargoes in exchange for guaranteed ship availability in time of declared emergency. Unlike the Civil Reserve Air Fleet (CRAF) program, SRP has never been implemented because of the American merchant fleet's tenuous position in international commerce and the potential loss of its meager market share. Despite the success with which Great Britain impressed numerous commercial ships during the Falkland conflict, foreign competitors easily filled the trade routes thus vacated. As a result, English shipowners lost a portion of their trade and many were forced to foreign registry.²⁰

Although not a portion of the civilian owned merchant fleet, the RRF and NDRF provide a considerable number of auxiliaries. Yet while DoD accepts no responsibility for maintenance of the merchant marine, "officials have pointed out that the constituent ships within the Ready Reserve Force do not meet military requirements."²¹ The ships, therefore, must come from civilian sources.

Regardless of the origin of ships, sufficient numbers of qualified mariners must be available to man them. Changes within the fleet have had considerable impact on the maritime workforce. The decreasing size of the merchant fleet has obviously reduced the demand for labor. Automation and to some extent containerization, have, by reducing shipboard manning requirements, further reduced the number of seagoing billets. In 1992, the average monthly shipboard employment was 14,446, down from 16,308 in 1991 and 10,538 fewer than 1981.²² Over time, this reduced demand translates into reduced supply.

During any contingency, the major requirement for merchant seamen will come from the RRF (and possibly NDRF). Two assumptions are made when planning for activation of the RRF. First, it must be assumed that the desired ships have been suitably maintained to allow rapid activation. During Desert Storm this was not always the case. Second, it must be assumed that a sufficiently large cadre of trained seamen will be available to man the ships. During Desert Storm, a number of activations and subsequent sailings were delayed due to crew shortages. VADM Paul Butcher, Deputy Commander USTRANSCOM remarked,

we broke out the ships (RRF) incrementally to accommodate the lack of machinists, boiler technicians, engineers, and so forth. If we had to break out all of the ships simultaneously, we would not have been successful.²³

The manpower shortages experienced during Desert Storm will only be exacerbated by the proposed expansion of the RRF to 142 ships by 1999.

The President's Commission on Merchant Marine and Defense (COMMAD) reported these results in 1987:

There is today insufficient strategic sealift, both ships and *trained personnel* [italics mine], for the United States, using only its resources as required by defense planning assumptions, to execute a major deployment in a single distant theater such as Southwest Asia. Without decisive action the situation will worsen substantially by the year 2000.¹⁴

Given those circumstances, it would be virtually impossible to implement the present "win-win" strategy which contemplates the ability to prosecute two near-simultaneous major regional conflicts.

Following the COMMAD report, a study prepared for MARAD estimated that by the year 2000, the number of active mariners will have fallen to about 10,800. From this pool, both commercial and defense needs will have to be filled. In the event of an extended military deployment, the study projected shortfalls of 1,603 mariners during the surge phase of mobilization and 7,273 during the sustainment phase (mobilization +100-120 days) of the contingency.¹⁵

A number of proposals to ensure a manpower base to support military requirements advocate the formation of a merchant marine reserve force of some kind or a reactivation of the former U.S. Maritime Service. Statutes exist authorizing the Secretary of Transportation and Maritime

Administrator "to establish and maintain a voluntary organization for the training of citizens of the United States to serve on merchant vessels of the United States."²⁶ A Merchant Marine Reserve Corps was founded in 1925 to ensure readily available, trained merchant seamen. It was disbanded in 1952 "due to lack of interest."²⁷ It has also been suggested that presidential recall of members from the Naval Fleet Reserve ("retirees" having served from 20-30 years active service) could meet initial manning shortfalls in a contingency situation.

The experience of Desert Storm demonstrated that not only is there a shortage of manpower, but certain special skills may be in seriously short supply. Many of the ships scheduled to sail to the Gulf were delayed while seamen to fill critical billets were recruited. The problem is that the majority of the ships in the RRF are relatively old and are powered by steam plants vice modern diesel engines. The pool of available mariners, with even limited steam powerplant experience is small and growing smaller daily. During Desert Storm, one ship of the RRF sailed under a waiver authorizing the employment of a foreign crew because American crewmen with the requisite skills and experience to operate its aging steam plant could not be found.²⁸ Men, not ships, may be the most important contribution the American merchant fleet can provide to national security.

Government and Industry

The Nixon Administration was the last to sponsor a truly comprehensive maritime policy. In 1968 he promised: "We shall adopt a policy that will enable American flag ships to carry much more American trade at competitive world prices."²⁹ To that end, his proposals became the Merchant Marine Act of 1970. Among other things, it extended operating subsidies for the first time to bulk and tanker shipping, empowered the Secretary of Commerce to negotiate low bid contracts for subsidized construction, offered tax-deferral on deposits to a capital construction fund, and encouraged construction of large, productive ships.

The goal of the Nixon program was construction of 300 new ships over a ten year period. Unfortunately, the program was torpedoed by recession, the Arab oil embargo, foreign competition, and the reluctance of large oil companies and heavy industries to divest themselves of their profitable foreign flag ships (a requirement to receive subsidies). Only 83 were completed.³⁰

Although the plan fell far short of its intended goals, it demonstrated the kind of government commitment necessary if the U.S. merchant fleet is to survive. Since then, a number of different "maritime reform" packages have been proposed. Those groups most likely to benefit from reform, labor unions, shipyards, and shipowners, however, seem unable to present a united front to the Congress.

Parochialism among the major actors causes them to work at cross purposes, intentionally undermining each others positions. Consequently, favorable reforms are lost in committee or die on the floor; a case in point being the 16 point plan proposed by Secretary of Commerce Andrew Card in 1992.

In today's climate of fiscal restraint, it is increasingly difficult to justify large outlays of money for programs which have questionable value to the nation. Despite the fact that operating subsidies in 1992 amounted to only \$187.3 million, there is an inherent aversion on the part of Congress and the people of this country to use tax dollars to subsidize private enterprise.³¹

Merchant shipping represents a relatively small portion of the economy, generating only about .2% of the gross national product despite its contribution to the balance of payments. The most compelling argument for continued support has long been the merchant fleet's contribution to national security, yet the Office of Management and Budget, citing incompatibility between requirements for commerce and defense, concluded in 1982 that: "National security arguments do not provide a strong justification for the provision of public assistance to the (maritime) industries."³²

More recently, it has been suggested in Washington that all subsidies to the maritime industry should end,

including preference cargoes. DoD has made its position clear, it has no inclination to help fund merchant marine support packages. In short, it seems the merchant marine is losing support in government circles.

Many people within the industry and government as well feel that only protectionist measures can preserve the American merchant fleet. Reservation of 15% (or more) of U.S. cargoes would ensure American ships a portion of the market. It has even been suggested that additional tariffs be levied on foreign ships built with "excessive" subsidies.³³ Such measures, however, contradict the notion of free trade which is very much a part of the American ethic.

A first step away from government support and toward a new maritime policy may instead be a "build-and-charter" (B&C) program. The Strategic Sealift Implementation Plan ordered by Congress in 1991 suggested that such a program would be the most cost effective way of meeting the nation's sealift needs while ensuring the survival of the commercial fleet. Series construction of a standard design, incorporating features satisfying both commercial and defense requirements, would insure low production costs. Charters, based on prevailing foreign rates, might be expected to provide revenues of \$137 million per ship over a projected 25 year life span.³⁴

Such a scheme provides benefits to all the partners; builders, operators, unions, government, and taxpayer. Together with liberalization of present laws to enhance the competitive standing of the existing fleet, this could signal a resurgence of the American merchant marine.

What is required from the maritime industry in return are concrete steps toward increased productivity, long-term vision, and innovation commensurate with the new commitment from government. Efforts have already been made to reduce union mandated minimum crew requirements. Further steps to increase individual productivity are necessary.

CHAPTER SEVEN

CONCLUSIONS AND RECOMMENDATIONS

The U.S. flag merchant marine is trapped in a long-term state of decline that, unless checked in the near future, could very well mean the end of our commercial cargo fleet. There are a number of reasons for this deterioration but chief among them are over-regulation, high operation and construction costs, aggressive labor, and complacent management.

Many shipowners are ready to place the blame for the present state of the maritime industry at the door of government. Over-regulation in pursuit of free competition has in fact provided foreign shipping with considerable advantages. High costs tend to limit the numbers of participants in international shipping, creating conditions conducive to the evolution of oligopolies, if not true monopolies. This, however, is somehow contrary to the American spirit of free play, hence the layers of legislation and regulation constricting efforts to increase productivity and therefore profitability.

For its part, government can point to inefficient management and lack of initiative on the part of shipowners as contributing to the overall decline of the industry. Too

often management has readily passed cost increases on to the customer rather than pursue innovation or take a firmer stance during labor negotiations.

Historically, maritime labor unions have been among the most aggressive, seeking and usually receiving liberal concessions. It was not until memberships began to feel the shortage of seagoing billets resulting from the shrinking fleet that union leadership abandoned its short term profit strategy and began to make concessions of its own to preserve jobs over the long run.

Each of the major players have contributed their share to the decline of the maritime industry. Unfortunately, it appears unlikely that any significant change is likely in the near future. The bottom line is, under existing circumstances, the U.S. flag merchant fleet cannot compete in the world marketplace. Furthermore, carrying only four percent of the nation's foreign trade, the U.S. flag fleet has virtually no influence on foreign flag operations.

The large number of bankruptcies experienced by the American maritime industry in the 1970s and 1980s in the face of numerous rate wars is testimony to their relative weakness compared to the foreign competition. The companies which survived are relatively secure today due to strong corporate parentage and/or diversification, not necessarily because of shipping operations.

The U.S. maritime industry is so weak that it could not reasonably be expected to transport significantly greater tonnage in time of crisis than it already does. This weakness is especially evident in the bulk and tanker trades. The nation is almost wholly dependent on foreign fleets for these critical services which supply not only petroleum, but over 95% of the nation's bauxite, titanium, and manganese, as well as significant quantities of other strategic minerals.¹

The non-availability of commercial shipping to support Operation Desert Storm graphically demonstrates the weakness of the U.S. merchant fleet. Despite years of subsidies to ensure that ships would be available for government use in time of emergency, no commercial shipping was requisitioned for two reasons. First, removal of U.S. shipping from international trade routes would result in loss of business to foreign flags; and second, the U.S. fleet could not provide the required types of ships.

Although the maritime industry could not supply sufficient shipping for the Gulf War, it was able to provide the mariners required to man the government owned ships of the RRF, barely. As the American merchant fleet shrinks, so too does the trained labor pool. Because of the "part-time" nature of seagoing employment (very few seamen are continuously at sea) it requires about 1.5 seamen per billet; therefore, loss of one billet equates to lost

employment opportunities for 1.5 mariners.² Unless deterioration of the commercial fleet can be halted, the civilian labor pool so necessary to support military requirements will eventually become exhausted.

The Merchant Marine Act of 1936 states that it is national policy to "foster the development and encourage the maintenance of such a [U.S. flag] merchant marine."³ Unfortunately, it does not provide guidelines for that support. Current subsidy programs are soon to expire and in today's fiscally constrained atmosphere, it is unlikely that significant new support programs (e.g., subsidies and tax credits) will be forthcoming.

Focusing on the three functions of a national flag merchant fleet, it becomes apparent that the U.S. merchant marine is presently capable of fulfilling only one. The American fleet has declined beyond the point at which it can influence foreign commerce; therefore, it provides no protection from unfair trading practices. Such protection can only be provided by governmental action. Furthermore, excess tonnage within the U.S. fleet is minimal, thereby offering little insurance against trade interruption caused by withdrawal of some portion of foreign shipping.

Although President Roosevelt specifically referred to "naval auxiliaries" when enumerating roles of a merchant marine, the most vital function for today's merchant marine is providing manpower not ships. This will continue to be

the case as long as the nation requires the capability to project military power overseas. If only for this reason then, the nation needs to ensure a healthy merchant marine.

The basic requirement for a U.S. flag merchant marine to fill even this one role remains commercial viability. If there are no ships, there is no manpower. To this end then the following recommendations are offered:

1. Enact a comprehensive national maritime policy.

2. Remove the link between the merchant marine and the shipbuilding industry. Although it seems un-American to "buy foreign", unless the government is willing to continue underwriting U.S. ship construction, "buy American" requirements should be lifted. After all, if the merchant fleet disappears, will the shipyards be far behind?

3. Relax anti-trust restrictions. By permitting American shipowners to participate in closed shipping conferences, they can conceivably operate more efficiently than they do now. Implementation of closed conferences on certain Atlantic routes for instance could alleviate present overtonnage problems, improving conditions for all. Apart from conferencing, deregulation would permit the formation of consortia, cargo sharing and rationalization, all of which would contribute to the vitality of the industry.

4. Reduce cost of doing business under the U.S. flag. While not desirable, subsidies have become a way of

life in the maritime industry. Until such time as the fleet can compete on its own merit, operating and construction subsidies must still remain a part of any national maritime package. Further cost reductions may be generated through relaxation of extraneous Coast Guard regulations and aggressive bargaining with labor unions.

While not a recommendation for the immediate future, the following is submitted for consideration. Many nations have turned to state ownership to achieve their national maritime goals. While this is another practice contrary to the American ideal, several cases support the efficiency of such operations. Both American President Lines (1939-52) and United States Lines (1921-29) were operated by the government following bankruptcy proceedings.⁴ Under government control, profitable operations were restored and in time each was returned to civilian ownership.

The solution to the preservation of the U.S. merchant marine is neither simple nor quick. It will take a concerted effort on the part of government, industry, and labor to salvage the American merchant fleet and ensure its continued contribution to national security.

ENDNOTES

Chapter One

¹J. D. Jerrold Kelley, The Question of Ships: The Navy and the Merchant Marine (New York: Charles Scribner's Sons, 1884), 7.

²U.S. Maritime Administration, 1992 Annual Report (Washington: Department of Transportation, 1993), 15.

³Tom Johnson, "U.S. Maritime Industry Just Barely Treading Water," Risk Management 36 (November 1989): 62.

⁴Samuel A. Lawrence, United States Maritime Shipping Policies And Politics (Washington: The Brookings Institution, 1966), 27.

⁵Irwin M. Heine, The U.S. Maritime Industry: In the National Interest (Washington: National Maritime Council, 1980), 56.

⁶Justin Martin, "Shrinking Fleet," Fortune 128 (November 1993): 16.

⁷U.S. Maritime Administration, 1992 Annual Report 2.

⁸Gary S. Misch, "New Hope For Maritime Reform? Or Will History Repeat Itself Once More?," Sea Power 36 (May 1993): 26.

⁹William Matthews, "Sealift Feels Strain to Meet Commitment," Navy Times (24 September 1990): 6.

¹⁰Lee Smith, "Lessons From the Rush to the Gulf," Fortune 123 (January 1991): 88.

¹¹Eric Schmitt, "US Cargo Fleet is Found Wanting," New York Times, 27 September 1990: A, 10a.

¹²James D. Hessman and Vincent C. Thomas Jr., "Combat-Loaded for Whitecap Conditions," Sea Power 36 (May 1993): 12.

¹³Lawrence, 22.

¹⁴Ibid., 22.

¹⁵Ibid., 26.

¹⁶Sergei G. Gorshkov, The Sea Power of the State (Elmsford, NY: Pergamon Press, 1979), 28.

Chapter Two

¹John G. Kilgour, The U.S. Merchant Marine: National Maritime Policy and Industrial Relations (New York: Praeger Publishers, 1975), 2.

Chapter Four

¹Sergei G. Gorshkov, The Sea Power of the State (Elmsford, NY: Pergamon Press, 1979), 1.

²K. Jack Bauer, A Maritime History of the United States: The Role of America's Seas and Waterways (Columbia, SC: University of South Carolina Press, 1988), 53.

³Irwin M. Heine, The U.S. Maritime Industry: In the National Interest (Washington: National Maritime Council, 1980) 16.

⁴J. D. Jerrold Kelley, The Question of Ships: The Navy and the Merchant Marine (New York: Charles Scribner's Sons, 1884), 18.

⁵Samuel A. Lawrence, United States Maritime Shipping Policies and Politics (Washington: The Brookings Institution, 1966), 33.

⁶Kelley, 165.

⁷Ibid., 195.

⁸Ibid., 55.

⁹Ibid., 107.

¹⁰Lawrence, 33.

¹¹Bauer, 250.

¹²Lawrence, 34.

¹³Ibid., 34.

- ¹⁴Ibid., 35.
- ¹⁵Bauer., 298.
- ¹⁶Lawrence, 39.
- ¹⁷Ibid., 40.
- ¹⁸Bauer, 305.
- ¹⁹Lawrence, 46.
- ²⁰Ibid., 50.
- ²¹Ibid., 74.
- ²²Ibid., 84.
- ²³Bauer, 286.
- ²⁴Lawrence, 91.
- ²⁵Bauer, 322.
- ²⁶Heine, U.S. Maritime Industry, 46-47.
- ²⁷William F. Fuchs, "Sealift Ships Play Major Role in Desert Storm," Defense Transportation Journal 47 (April 1991): 10.
- ²⁸James Kitfield, "Dash to the Desert: III. Lifeline Across the Seas," Government Executive 22 (November 1990): 26.
- ²⁹William Matthews, "Sealift Feels Strain to Meet Commitment," Navy Times (24 September 1990): 6, quoted in Andrew S. Gibson and Jacob L. Shuford, "Desert Shield and Strategic Sealift," Naval War College Review 44 (Spring 1991): 14.
- ³⁰Gibson and Shuford, 17.

Chapter Five

- ¹U.S. Maritime Administration, 1992 Annual Report (Washington: Department of Transportation, 1993), 8.
- ²Statistical Abstracts of the United States (Washington: GPO, 1993), 642.

³"House Passes Bill Assuring Seamen Reemployment," Congressional Quarterly Weekly Review 51 (20 March 1993): 666.

⁴"House Panel Floats Maritime Plan," Congressional Quarterly Weekly Review 51 (22 May 1993): 1288.

⁵Maritime Administration, 1992 Annual Report 16-20.

⁶Jon Healy, "Bill Would Provide Subsidies For Shipping Companies," Congressional Quarterly Weekly Report 51 (9 August 1993): 2152.

⁷Robert W. Kesteloot, "The Future Will Be Grimmer Than Ever for the Merchant Marine Unless National Maritime Policy's Changed," The Almanac of Seapower 1993 36 (January 1993): 69.

⁸"House Panel Floats Maritime Plan," 1288.

⁹L. Edgar Prina, "Coalition Formed To Pass Maritime Reform Program," Sea Power, 36 (November 1993): 29.

¹⁰Ibid., 33.

¹¹Ibid., 30.

¹²Ibid., 29.

¹³Justin Martin, "Shrinking Fleet," Fortune 128 (November 1993): 16.

¹⁴Kesteloot, The Future Will Be Grimmer, 64.

¹⁵Andrew E. Gibson, "Where There Is No Vision," University of California Paul Hall Memorial Endowment Lectures, Delivered 21 April 1992, Washington, DC.

¹⁶Maritime Administration, 1992 Annual Report, 51.

¹⁷"The Honorable Andrew Card, Secretary of Transportation," Proceedings 118 (December 1992): 48.

¹⁸Robert H. Pouch, "The U.S. Merchant Marine and Maritime Industry in Review," Proceedings 119 (May 1993): 146.

¹⁹Alan W. Cafruny, Ruling the Waves: The Political Economy of Shipping, (Berkeley: University of California Press, 1987), 54.

²⁰Ibid., 55.

²¹John A. Hobson, Evolution of Modern Capitalism, (New York: Scribner's, 1916), 175-76, quoted in Cafruny, 54.

²²Cafruny, 56.

²³Ibid., 192.

²⁴Ibid., 119-20

²⁵Clinton H. Whitehurst, The U.S. Merchant Marine: In Search of an Enduring Maritime Policy, (Annapolis: Naval Institute Press, 1983) 102.

²⁶Cafruny, 190.

²⁷U.S. General Accounting Office, Changes in Federal Maritime Regulation Can Increase Efficiency and Reduce Costs in the Ocean Liner Shipping Industry, (Washington: GPO, 1982), 16.

²⁸René De La Pedraja, The Rise & Decline of U.S. Merchant Shipping in the Twentieth Century, (New York: Twayne Publishers, 1992), 15.

²⁹John G. Kilgour, The U.S. Merchant Marine: National Maritime Policy and Industrial Relations, (New York: Praeger Publishers, 1975), 10.

³⁰Gerald R. Jantscher, Bread Upon the Waters: Federal Aids to the Maritime Industries, (Washington: The Brookings Institution, 1975), 13.

³¹Ibid., 14.

³²Gary S. Misch, "New Hope For Maritime Reform? Or Will History Repeat Itself Once More?," Sea Power, 36 (May 1993): 21.

³³Whitehurst, 22.

³⁴Kilgour, 16.

³⁵Whitehurst, 105.

³⁶Ibid., 1.

³⁷Robert C. Waters, "The Military Sealift Command Versus the U.S. Flag Liner Operations," Transportation Journal, 28 (Summer 1989): 28.

³⁸James Asher, "The U.S. Merchant Marine and the Maritime World in 1988," Proceedings, 115 (May 1989): 192.

³⁹Kesteloot, "The Future Will Be Grimmer," 66.

⁴⁰De La Pedraja, 16.

⁴¹Statistical Abstracts 1993, 646.

⁴²Paul Hall, "Maritime Day Speech", Delivered at The Propeller Club, 22 May 1973, San Francisco, quoted in Heine, U.S. Maritime Industry, 175.

⁴³Walter Kross, Comparison of U.S. Flag Versus Foreign Registry Labor Rates, USTRANSCOM Point Paper, 19 February 1991, in T. D. Glass, "Sealift, Sealift Imperatives and the Operational Commander," Unpublished Research Report, U.S. Navy War College, 1992, 8.

⁴⁴Whitehurst, 30.

⁴⁵Maritime Administration, 1992 Annual Report, 2.

⁴⁶De La Pedraja, 176.

⁴⁷Ibid., 177.

⁴⁸Ibid., 178-79.

⁴⁹Ibid., 176.

⁵⁰Ibid., 255.

⁵¹Ibid., 264.

⁵²Ibid., 280.

Chapter Six

¹U.S. Maritime Commission, Economic Survey of the Merchant Marine, (Washington: GPO, 1937), quoted in Jantscher, 127.

²Réne De La Pedraja, The Rise & Decline of U.S. Merchant Shipping in the Twentieth Century, (New York: Twayne Publishers, 1992), 47; Gerald R. Jantscher, Bread Upon the Waters: Federal Aid to the Maritime Industries, (Washington: The Brookings Institution, 1975), 122.

³U.S. Maritime Administration, United States Oceanborne Foreign Trade Routes, (Washington: Department of Transportation, October 1992), 7-11.

⁴U.S. Maritime Administration, 1992 Annual Report, (Washington: Department of Transportation, 1993), 13.

⁵Strategic Mobility: Getting There is the Big Problem, Association of the United States Army, Special Report, (Washington: AUSA, December 1989), 12.

⁶Samuel A. Lawrence, United States Maritime Shipping Policies and Politics (Washington: The Brookings Institution, 1966), 229.

⁷William H. Cracknell, ed., Understanding Soviet Naval Developments, (Washington: GPO, January 1981), 62.

⁸U.S. Maritime Administration, 1971 Annual Report, (Washington: Department of Commerce, 1972), 62-63.

⁹Norman Polmar, Soviet Naval Power: Challenge for the 1970s, (New York: Crane, Russak & Co., Inc., 1974), 73.

¹⁰David Brown, The Royal Navy and the Falklands War, (Annapolis: Naval Institute Press, 1987), 365-70.

¹¹Maritime Administration, 1992 Annual Report, 34.

¹²M. A. Ulrich, "Sealift: Goal and Reality," (Master's Thesis, U.S. Naval War College, 1991), 6.

¹³The United States Merchant Marine at War: Report of the War Shipping Administrator to the President, (Washington: GPO, 1946), 6.

¹⁴U.S. Maritime Administration, Vessel Inventory Report, (Washington: Department of Transportation, July 1992), vi.

¹⁵Lawrence, 232.

¹⁶Lawrence, 232.

¹⁷U.S. Maritime Administration, Effective U.S. Control (EUSC) as of June 30, 1981, (Washington: Department of Transportation, November 1981), in Clinton H. Whitehurst, The U.S. Merchant Marine: In Search of an Enduring Policy, (Annapolis: Naval Institute Press, 1983), 222.

¹⁸Robert W. Kesteloot, "The Future Will Be Grimmer Than Ever for the Merchant Marine Unless National Maritime Policy's Changed," The Almanac of Seapower 1993 36 (January 1993): 66.

¹⁹Lawrence, 229.

²⁰R. E. Houser, "Will The Military Sealift Become Our Achilles Heel," (Research Paper, Naval War College, 1991), 18; M. R. Lenci, "Manning U.S. Strategic Sealift in the Year 2000," (Research Paper, Naval War College, 1991), 21.

²¹Eric Schmitt, "US Cargo Fleet is Found Wanting," New York Times, 27 September 1990: A, 10d.

²²Maritime Administration 1992 Annual Report, 51; U.S. Maritime Administration, 1982 Annual Report, (Washington: Department of Transportation, 1983), 53.

²³"VADM Paul D. Butcher, interview with Inside the Navy," 29 April 1991, quoted in Richard T. Ackley, "Sealift and National Security," Proceedings, 118 (July 1992): 46.

²⁴First Report of the Commission on Merchant Marine and Defense, 1987, quoted in Warren G. Leback, "Needed: A Consensus on Maritime Policy," Sea Power, 35 (April 1992): 71.

²⁵Carl Douglas and Christine Meers, Crewing the Merchant Marine for Mobilization, MARAD Report Number: MA-RD-840-90013, (Arlington: Presearch, Inc., 1991), i-ii.

²⁶46 U.S.C. §1295e, quoted in Earl J. Higgins, "Who Will Man the Merchant Ships?," Proceedings, 115 (February 1989): 37.

²⁷Lawrence, 232.

²⁸"Sealift Effort to Saudi Arabia Plagued by Lack of Steam Qualified Crews," Inside the Navy, 17 September 1990, 6.

²⁹Irwin M. Heine, "Whatever Happened to the Nixon Maritime Program?," Sea Power, 15 (May 1972): 23.

³⁰Leback, 70.

³¹Maritime Administration, 1992 Annual Report, 16.

¹²Robert W. Kesteloot, "Will Any Action Ever Be Taken to Keep Our Merchant Marine Alive?," Almanac of Seapower, 34 (January 1991): 59.

¹³Kirk Victor, "Maritime Minefield," National Journal, 24 (15 August 1992): 1888.

¹⁴Kesteloot, "Will Any Action Ever be Taken?", 62.

Chapter Seven

¹K. Jack Bauer, A Maritime History of the United States: The Role of America's Seas and Waterways (Columbia, SC: University of South Carolina Press, 1988), 325.

²Third Report of the Commission on Merchant Marine and Defense 1988, in M.R. Lenci, "Manning U.S. Strategic Sealift in the Year 2000," (Research Paper, Naval War College, 1991), 8.

³Merchant Marine Act of 1936, quoted in B. E. Smith, "United States International Maritime Industry: Challenges to Sustaining the Force," (MMAS Thesis, U.S. Army Command and General Staff College, 1988), 84.

⁴Réne De La Pedraja, The Rise & Decline of U.S. Merchant Shipping in the Twentieth Century, (New York: Twayne Publishers, 1992), 284.

GLOSSARY

Cabotage. General category of laws which reserve coastal commerce for national flag shipping.

Capital Construction Fund (CCF). Government administered, tax deferred account into which shipping profits may be placed in anticipation of future ship construction or purchase.

Combat Logistics Force (CLF). Navy logistics support ships (oilers, ammunition ships, combat stores ships). Currently undergoing transfer to the Military Sealift Command where they will be operated by civilian mariners vice naval personnel.

Construction Differential Subsidy (CDS). Payment providing an operator the difference between the cost of US ship construction and foreign construction.

Containership. Vessels fitted to carry large, standard sized shipping containers.

Deadweight Tons (dwt). Vessel's capacity in tons of 2,240 lbs.

Effective US Control (EUSC). Mechanism through which US owned ships registered primarily under the flags of Liberia or Panama are expected to revert to US control in time of declared emergency.

Fast Sealift Ships (FSS). Former commercial containerships capable of 33 knots. Maintained by the Military Sealift Command (MSC) in 3-5 day readiness status.

Flag of Convenience. A country which offers its registry to foreign shipowners for only modest fees. In return owners are subject to few if any regulations, reduced tax burdens, and lower operating and maintenance costs.

Intermodal. Freight transportation system integrating ocean shipping with land transportation particularly through the employment of standardized freight container systems.

Jones Act. Section of the Merchant Marine Act of 1920 prohibiting foreign shipping in the domestic trade (trade between U.S. ports).

Lighter Aboard Ship (LASH) Vessels. Ships which can embark loaded lighter craft directly via heavy lift elevators. Capable of providing service to small ports or those with limited cargo handling facilities.

Liner. Shipping services advertised and provided by a common carrier, over a specified route, on a fairly regular schedule.

Maritime Administration (MARAD). Government agency within the Department of Transportation responsible for administering government loan and subsidy programs. Maintains RRF and NDRF.

National Defense Feature. Additional equipment included during ship construction to enhance utility in a military role (e.g., communications equipment, damage control equipment).

National Defense Reserve Fleet (NDRF). Government owned ships maintained by MARAD in 21-90 day readiness status. Many are of World War II vintage.

Naval Fleet Auxiliary Force (NFAF). Ships owned and operated by the Military Sealift Command in direct support of deployed naval operations and manned by civilian crews. Recognized by blue and yellow stripes on the stack.

Operating Differential Subsidy (ODS). Payment providing an operator the difference between U.S. and foreign operating costs (labor, insurance, routine maintenance and repair).

Ready Reserve Force (RRF). Government owned ships maintained by MARAD in 5, 10, and 20 day readiness status. Average age is 24 years.

Roll-on/Roll-off (RO/RO). A ship designed to load rolling stock via a ramp to pierside or other facility.

Sea-Barge (Seabee). Similar to a LASH vessel, Seabees can accommodate larger barges than a LASH. Seabees may also be used to transport other small vessels in a large well deck.

Sealift Readiness Program (SRP). Program under which owners pledge a portion of their assets in time of national

emergency in exchange for eligibility for Department of Defense (DoD) cargoes.

Shipping Conference. An association of freight carriers which establishes rate structures over prescribed trade routes. "Open" conferences must admit any applicant, legal under US law. "Closed" conferences admit only those whom present members desire, illegal under US law.

Tramp. Ships providing non-liner service; shipping operating on irregular or non-scheduled basis.

Ultra Large Crude Carrier (ULCC). Tanker of from 250,000 to 500,000 dwt.

Very Large Crude Carrier (VLCC). Tanker of from 100,000 to 250,000 dwt.

BIBLIOGRAPHY

Books

- Bauer, K. Jack. A Maritime History of the United States: The Role of America's Seas and Waterways. Columbia, SC: University of South Carolina Press, 1988.
- Barker, James R. and Robert Brandwein. The United States Merchant Marine in National Perspective. Lexington, MA: Heath Lexington Books, 1970.
- Brown, David. The Royal Navy and the Falklands War. Annapolis: Naval Institute Press, 1987.
- Cafruny, Alan W. Ruling the Waves: The Political Economy of Shipping. Berkeley: University of California Press, 1987.
- De La Pedraja, René. The Rise & Decline U.S. Merchant Shipping in the Twentieth Century. New York: Twayne Publishers, 1992.
- Gorshkov, S. G. The Sea Power of the State. Elmsford, NY: Pergamon Press, 1979.
- Heine, Irwin M. The U.S. Maritime Industry: In the National Interest. Washington: National Maritime Commission, 1980.
- Hobson, John A. Evolution of Modern Capitalism. New York: Scribner's, 1916. Quoted in Alan W. Cafruny. Ruling the Waves: The Political Economy of Shipping, 54. Berkeley: University of California Press, 1987.
- Jantscher, Gerald R. Bread Upon the Waters: Federal Aids to the Maritime Industries. Washington: The Brookings Institution, 1975.
- Kelley, J. D. Jerrold. The Question of Ships: The Navy and the Merchant Marine. New York: Charles Scribner's Sons, 1884.

- Kilgour, John G. The U.S. Merchant Marine: National Maritime Policy and Industrial Relations. New York: Praeger, 1975.
- Lawrence, Samuel A. United States Shipping Policies and Politics. Washington: The Brookings Institution, 1966.
- Mahan, Alfred Thayer. The Influence of Sea Power Upon History 1660-1805. Novato, CA: Presidio Press, 1980.
- Polmar, Norman. Soviet Naval Power: Challenge for the Future. New York: Crane, Russak & Co., Inc., 1974.
- Whitehurst, Clinton H. The U.S. Merchant Marine: In Search of an Enduring Maritime Policy. Annapolis: Naval Institute Press, 1983.

Articles

- Ackley, Richard T. "Sealift and National Security." Proceedings 118 (July 1992): 41-47.
- Asher, James. "The U.S. Merchant Marine and the Maritime World in 1988." Proceedings 115 (May 1989): 188-193.
- Fuchs, William F. "Sealift Ships Play Major Role in Desert Storm." Defense Transportation Journal 47 (April 1991): 10-14.
- Gibson, Andrew E. and Jacob L. Shuford. "Desert Shield and Strategic Sealift." Naval War College Review 44 (Spring 1991): 6-19.
- Healy, Jon. "Bill Would Provide Subsidies For Shipping Companies." Congressional Quarterly Weekly Review 51 (9 August 1993): 2152.
- Heine, Irwin M. "Whatever Happened to the Nixon Maritime Program?" Sea Power 15 (May 1972): 23-27.
- Hessman, James D. and Vincent C. Thomas. "Combat-Loaded for Whitecap Conditions." Sea Power 36 (May 1993): 11-16.
- Higgins, Earl J. "Who Will Man the Merchant Ships?" Proceedings 115 (February 1989): 34-37.
- "The Honorable Andrew Card, Secretary of Transportation." Proceedings 118 (December 1992): 48-50.

"House Panel Floats Maritime Plan." Congressional Quarterly Weekly Review 51 (22 May 1993): 1288.

"House Passes Bill Assuring Seamen Reemployment." Congressional Quarterly Weekly Review 51 (20 March 1993): 666.

Johnson, Tom. "U.S. Maritime Industry Just Barely Treading Water." Risk Management 36 (November 1989): 62-64.

Kesteloot, Robert W. "Will Any Action Ever Be Taken to Keep Our Merchant Marine Alive?" The Almanac of Seapower 1991 34 (January 1991): 58-65.

_____. "The Future Will Be Grimmer Than Ever for the Merchant Marine Unless National Maritime Policy is Changed." The Almanac of Seapower 1993 36 (January 1993): 64-71.

Kirk, Victor. "Maritime Minefield." National Journal 24 (15 August 1992): 1885-1888.

Kitfield, James. "Dash to the Desert: III Lifeline Across the Seas." Government Executive 22 (November 1990): 14-32.

Leback, Warren G. "Needed: A Consensus on Maritime Policy." Sea Power 35 (April 1992): 65-72.

Martin, Justin. "Shrinking Fleet." Fortune 128 (September 1993): 14-16.

Matthews, William. "Sealift Feels Strain to Meet Commitment" Navy Times (24 September 1990): 6.

Misch, Gary S. "New Hope for Maritime Reform? Or will History Repeat Itself Once More?" Sea Power 36 (May 1993): 20-26.

Pouch, Robert H. "The U.S. Merchant Marine and Maritime Industry in Review." Proceedings 119 (May 1993): 164-168.

Prina, L. Edgar. "Coalition Formed To Pass Maritime Reform Program." Sea Power 36 (November 1993): 29-34.

Schmitt, Eric. "U.S. Cargo Fleet is Found Wanting." New York Times, 27 September 1990, A 10.

"Sealift Effort to Saudi Arabia Plagued By Lack of Steam Qualified Crews." Inside the Navy (17 September 1990): 6.

Smith, Lee. "Lessons Learned From the Rush to the Gulf." Fortune 123 (January 1991): 86-88.

"VADM Paul D. Butcher interview with Inside the Navy" (29 April 1991). Quoted in Richard T. Ackley. "Sealift and National Security," 46. Proceedings 118 (July 1991): 41-47.

Waters, Robert C. "The Military Sealift Command Versus the U.S. Flag Liner Operations." Transportation Journal 28 (Summer 1989): 28-34.

Government Publications

Commission on Merchant Marine and Defense. First Report: Findings of Fact and Conclusions. Washington: Commission on Merchant Marine and Defense, 1987. Quoted in Warren G. Leback. "Needed: A Consensus on Maritime Policy," 71. Sea Power 35 (April 1992): 65-72.

Commission on Merchant Marine and Defense. Third Report: Findings of Fact and Conclusions. Washington: Commission on Merchant Marine and Defense, 1988. In M. R. Lenci. "Manning U.S. Strategic Sealift in the Year 2000," 8. Research Report, U.S. Naval War College, 1991.

Cracknell, William H., ed. Understanding Soviet Naval Developments. Washington: GPO, 1981.

Douglas, Carl and Christie Meers. Crewing the Merchant Marine for Mobilization. MARAD Report Number: MA-RD-840-90013. Arlington: Presearch, Inc., 1991.

Kross, Walter. "Comparison of U.S. Flag Versus Foreign Registry Labor Costs." USTRANSCOM Point Paper, 1991. In T. D. Glass. "Sealift, Sealift Imperatives and the Operational Commander," 8-9. Research Report, U.S. Naval War College, 1992.

Statistical Abstracts of the United States 1993. Washington: GPO, 1993.

The United States Merchant Marine at War. Report of the War Shipping Administrator to the President. Washington: GPO, 1946.

- U.S. General Accounting Office, Changes in Federal Maritime Regulation Can Increase Efficiency and Reduce Costs in the Ocean Liner Shipping Industry. Washington: GPO, 1982.
- U.S. Maritime Administration. 1971 Annual Report. Washington: Department of Commerce, 1972.
- _____. 1982 Annual Report. Washington: Department of Transportation, 1983.
- _____. 1992 Annual Report. Washington: Department of Transportation, 1993.
- _____. Effective U.S. Control (EUSC) as of June 30, 1981. Washington: Department of Transportation, 1981.
- _____. United States Oceanborne Foreign Trade Routes 1989-1990. Washington: Department of Transportation, 1992.
- _____. Vessel Inventory Report. Washington: Department of Transportation, 1992.
- U.S. Maritime Commission. Economic Survey of the Merchant Marine. Washington: GPO, 1937. Quoted in Gerald R. Jantscher, Bread Upon the Waters: Federal Aids to the Maritime Industries, 127. Washington: The Brookings Institution, 1975.
- 46 U.S.C. §1295e. Quoted in Earl J. Higgins, "Who Will Man the Merchant Ships?", 37. Proceedings 115 (February 1989): 34-37.

Lectures

- Gibson, Andrew E. Where There Is No Vision. University of Southern California Paul Hall Memorial Endowment Lectures, Washington, D.C., 21 April 1992.

Theses and Papers

- Glass, T. D. "Sealift, Sealift Imperatives and the Operational Commander." Research Report. U.S. Naval War College, 1991.
- Houser, R. E. "Will the Military Sealift Become Our Achilles Heel?" Research Report. U.S. Naval War College, 1991.

Lenci, M. R. "Manning U.S. Strategic Sealift in the Year 2000." Research Report. U.S. Naval War College, 1991.

Smith, B. E. "United States International Maritime Industry: Challenges to Sustaining the Force." Master of Military Art and Science. Thesis, U.S. Army Command and General Staff College, 1988.

Ulrich, M. A. "Strategic Sealift: Goal and Reality." Master's Thesis. U.S. Naval Post Graduate School, 1986.

Speeches

Hall, Paul. "Maritime Day Speech." Delivered at the Propeller Club, San Francisco, 22 May 1972. Quoted in Irwin M. Heine. The U.S. Maritime Industry: In the National Interest, 175. Washington: National Maritime Council, 1980 .

Special Reports

Association of the United States Army, Special Report. Strategic Mobility: Getting There is the Big Problem. Washington: AUSA, December 1989.

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